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The Massachusetts Medical Society

PROCEEDINGS OF THE COUNCIL

OCTOBER 1, 1924

A STATED MEETING of the Council was held in John Ware Hall, Boston Medical Library, Wednesday, October 1, 1924, at twelve o'clock noon, the President, Dr. E. H. Bigelow, being in the chair and these 112 councilors present:

BARNSTAPLE

W. D. Kinney, Osterville.

BERKSHIRE

A. P. Merrill, Pittsfield.

BRISTOL. NORTH

W. H. Allen, Mansfield.
F. A. Hubbard, Taunton.

BRISTOL. SOUTH

E. F. Cody, New Bedford.
A. I. Connell, Fall River.
D. J. Fennelly, Fall River.
C. J. Leary, New Bedford.
W. A. Nield, New Bedford.

ESSEX. NORTH

C. S. Benson, Haverhill.
E. S. Bagnall, Groveland.
R. V. Bakelot, Methuen.
J. Forrest Burnham, Lawrence.
W. W. Furin, Haverhill.
A. M. Hubbell, Haverhill.
G. E. Kurth, Lawrence.
F. W. Snow, Newburyport.
W. D. Walker, Andover.

ESSEX. SOUTH

F. W. Baldwin, Danvers.
J. F. Donaldson, Salem.
H. K. Foster, Peabody.
W. T. Hopkins, Lynn.
P. P. Johnson, Beverly.
J. F. Jordan, Peabody.
A. N. Sargent, Salem.

FRANKLIN

C. P. Twitchell, Greenfield.

HAMPTON

J. B. Atwater, Westfield.
J. L. Bliss, Holyoke.

HAMPSHIRE

A. J. Bonneville, Hatfield.

MIDDLESEX. EAST

Robert Chalmers, Woburn.
Richard Dutton, Wakefield.

MIDDLESEX. NORTH

A. R. Gardner, Lowell.
W. B. Jackson, Lowell.
J. H. Lambert, Lowell.
J. B. O'Connor, Lowell.
T. F. Carroll, Lowell.
T. A. Stamas, Lowell.

MIDDLESEX. SOUTH

E. A. Andrews, Newton Center.
E. H. Bigelow, Framingham Center, President.
A. H. Blake, West Somerville.
F. B. M. Cady, Cambridge.
C. B. Fuller, Waltham.
S. R. Lancaster, Cambridge.
Edward Mellus, Newton.
C. E. Mongan, Somerville.
W. A. Putnam, Cambridge.
J. W. Sever, Cambridge.
F. G. Smith, Somerville.
C. H. Staples, Malden.
E. H. Stevens, Cambridge.
A. K. Stone, Framingham Center, Treasurer.
Alfred Worcester, Waltham, Ex-President.

NORFOLK

D. N. Blakely, Brookline.
W. L. Burrage, Brookline, Secretary.
Samuel Crowell, Dorchester.
F. S. Cruckshank, Dorchester.
C. G. Dewey, Dorchester.
D. G. Eldridge, Dorchester.
C. B. Faunce, Jr., Brookline.
C. S. Francis, Brookline.
Maurice Gerstein, Roxbury.
A. H. Hodgdon, Dedham.
G. W. Kaan, Brookline.
Bradford Kent, Dorchester.
J. S. H. Leard, West Roxbury.
Edward Martin, Roxbury.
J. S. May, Roxbury.
T. J. Murphy, Roxbury.
M. V. Pierce, Milton.
Harriet E. Rogers, Norwood.
L. A. Roberts, Dorchester.
E. T. Rollins, Jamaica Plain.

NORFOLK. SOUTH

C. A. Sullivan, South Braintree.
C. S. Adams, Wollaston.
O. H. Howe, Cohasset.
G. H. Ryer, Quincy.

PLYMOUTH

W. C. Keith, Brockton.
Gilman Osgood, Rockland.
F. G. Wheatley, North Abington.

SUFFOLK

C. M. Smith, Boston.
 S. H. Ayer, Boston.
 J. W. Bartol, Boston, Ex-President.
 Robert Bonney, East Boston.
 V. Y. Bowditch, Boston.
 M. E. Champion, Boston.
 David Cheever, Boston.
 Channing Frothingham, Boston.
 J. E. Goldthwait, Boston.
 W. C. Howe, Boston.
 J. C. Hubbard, Boston.
 F. B. Lund, Boston.
 Donald Macomber, Boston.
 R. H. Miller, Boston.
 T. J. O'Brien, Boston.
 R. B. Osgood, Boston.
 Jane D. K. Sabine, Boston.
 J. S. Stone, Boston.
 Louisa P. Tingley, Boston.
 F. H. Williams, Boston.

WORCESTER

L. R. Bragg, Webster.
 W. P. Bowers, Clinton, Ex-President.
 G. A. Dix, Worcester.
 G. E. Emery, Worcester.
 J. J. Goodwin, Clinton.
 R. W. Greene, Worcester.
 David Harrower, Worcester.
 A. G. Hurd, Millbury.
 F. H. Washburn, Holden.
 S. B. Woodward, Worcester, Ex-President.

WORCESTER NORTH

W. E. Currier, Leominster.
 H. R. Nye, Leominster.
 D. S. Woodworth, Fitchburg.

The Secretary read the minutes of the last meeting in abstract. There being no errors or corrections noted the minutes were accepted as printed and read. The Secretary read the resignation of R. B. Butler as councilor of the Bristol South District and it was accepted. Dr. Ralph W. Jackson of Fall River was nominated from the floor to fill the vacancy; the nomination being seconded, Dr. Jackson was elected councilor. The Secretary read the names of the nominating councilors and alternates by districts and the following responded and left the room: W. D. Kinney, BARNSTABLE; A. P. Merrill, BERKSHIRE; F. A. Hubbard, BRISTOL NORTH; E. F. Cody, BRISTOL SOUTH; A. M. HUBBELL, ESSEX NORTH; W. T. Hopkins, ESSEX SOUTH; G. P. Twitchell, FRANKLIN; J. B. Atwater, HAMPTON; J. B. O'Connor, MIDDLESEX NORTH; D. G. Eldridge, NORFOLK; C. S. Adams, NORFOLK SOUTH; F. G. Wheatley, PLYMOUTH; David Cheever, SUFFOLK; David Harrower, WORCESTER; W. E. Currier, WORCESTER NORTH. When the committee returned Dr. Cody announced that they placed in nomination the name of Ralph W. Jackson, of Fall River, for the office of Vice-President. On motion, duly seconded, the Secretary was directed to write an official ballot and cast it for Dr. Jackson. He did so and the President announced that Dr. Jackson had been duly elected Vice-President of the Society.

The President made the following remarks:

We have recently had New England Week, the purpose being to unify the New England spirit, re-

source and energy, to guard the old foundations, and for a forward movement to larger and better things.

New England medicine is coming to its own. Testimony from without is not wanting to the pre-eminence of our physicians in the country today. An eminent internist, connected with the Cornell Medical School, says that Boston gives promise of being the medical center of the country in the future.

I consider the influence of the *Boston Medical and Surgical Journal* the dominant factor in this achievement. The active support of the *Journal* of our Society, by our members, will hasten the happy day of our assuming that commanding position in the country.

In this connection the time has come, in my opinion, when the Council should consider the further needs of the State Society.

Do we not need an adequate headquarters for the Society, where its hospitality may be dispensed and the activities of its committees promoted. Attention to this need has been voiced by members in the past. Our committees, notably that on State and National Legislation, and that on Public Health, are hampered by a lack of secretarial service and office room. The Committee on Legislation has had as its secretaries men devoted to the Society at serious encroachment on their private practice. We cannot always command such service. This holds good in a degree with the other committees. We gratefully recognize the hospitality of the Boston Medical Library, generously extended the Massachusetts Medical Society for many years.

If the Massachusetts Medical Society is to assume its rightful leadership, a headquarters for its 4100 members is necessary to express its ideals, to suitably house its committees, and to prevent overlapping in the work of the departments.

The needs of our *Journal* for more room and closer affiliation with the work of the Society are evident to all.

I would suggest that a committee be chosen to consider this matter, to confer with the Medical Library and to report at later meetings of the Council.

How are our disabled soldiers cared for six years after the war?

In a neighboring State, an ex-airman, who developed pulmonary tuberculosis in the service, was ordered, this spring, across the State for reexamination. He had been under Dr. Brown's care at Saranac. He was fighting for his life, for his wife and two little children; the weather was bad, he asked permission to wait the coming of the examiner to his city; this request was refused. Dr. Brown's report on the serious condition of his lungs was ignored. He went to the distant city. The examiner could not be found. Later he made a second trip. The examiner said: "There is nothing the matter with you." This is discreditable to our profession and to the Government.

I ask again for subscriptions for the History of the Society, that a financial burden may be lifted from our Secretary and that the honor of the Society be maintained.

The Committee on State and National Legislation has been untiring in its work. The secretary of the committee will report to you today.

I find in our Legislature evidence of the ancient prejudice against physicians; Dr. Reginald H. Fitz stated the case in his annual oration, many years ago. He said: "The medical profession in this State has lost its influence with the Legislature for the reason that it always advocates some selfish proposition." "When physicians appear before a committee the members say: 'What axe have these fellows to grind now?'"

In a Western State, recently, a campaign to furnish free medical service to crippled children was instituted by a private organization of business men.

Legislative action was sought for the performance of this relief work. At the hearing strong opposition was made by the organized medical profession. After the hearing the chairman of the committee said to the spokesman for the physicians: "Go home and forget it, and I will forget it. If the public in this State knew of your opposition to the proposed service to crippled children you would be unqualifiedly condemned and your future influence would be gone."

In Massachusetts, physicians have it in their power to remove any prejudice against them on Beacon Hill.

Every new phase of professional work suffers from lack of standards. These standards must necessarily be worked out in practice. This is exemplified at this time by the dissatisfaction with the work of the public health nurse. Criticism of this work is heard as freely within the nursing profession as without. This criticism is largely due to a lack of commonly accepted standards of service and fields of activity. Since the demands on the nurse in city and country obviously vary, isn't the logical solution to be found in district conferences, between representatives of local medical and nursing organizations in order to outline a program based on their peculiar local needs?

We have recently lost by death an honored member of our Council, Dr. John Duff of Charlestown. We cherish his memory, for his great heart, his unselfish devotion to duty, his high character and professional attainments.

Dr. Dwight O'Hara, Chairman, presented the report of the Committee of Arrangements for the annual meeting in 1925, recommending that the meeting be held in Boston on Tuesday and Wednesday, June 9 and 10, 1925. The report was accepted and its recommendations adopted.

Dr. R. B. Osgood reported for the Committee on Publications and Scientific Papers that his committee had held two meetings since the annual meeting and had perfected a plan by which the annual meeting might be of greater interest to the Fellows at large rather than to those interested in the specialties who attend meetings of Sections. They thought that fewer and selected papers should be read on subjects of general interest; that each Section should provide at least one of the best papers presented to its officers; in other words that there should be four general meetings of the Society; that each chairman of the six existing Sections be asked to submit to the Committee on Publications and Scientific Papers one paper from his Section which he considers most fitting to be read; that the Committee on Publications and Scientific Papers shall select five other papers to be read before the Society; that these eleven, together with the Annual Discourse, shall constitute the scientific session. Also that Fellows be allowed to submit other papers, the titles of which shall appear on the official program, the papers themselves to be read, at the discretion of the presiding officer, if time permits. It is understood that the officers of the Sections shall be in charge of the meetings while their papers are being read and that the President of the Society shall preside during the reading of the five papers furnished by the committee. The committee had appointed as a sub-committee to select readers of five papers: Dr. E. W. Taylor and Dr.

R. M. Green. Officers of the Sections are asked to get into touch with them in order to perfect the scientific program at the earliest date practicable.

The chair asked if there was any action to be taken, and as there was no response he said he saw only approval on the part of the Council for the plan outlined.

Dr. D. N. Blakely offered the following report of the Committee on Membership and Finance, as to membership. After an inquiry as to the status of one man to be deprived of the privileges of fellowship and the answer by the chairman of the committee the report was accepted and its recommendations adopted.

REPORT OF COMMITTEE ON MEMBERSHIP AND FINANCE,
AS TO MEMBERSHIP

The Committee on Membership and Finance makes the following recommendations as to membership:

1. That the following named 5 Fellows be allowed to retire under the provisions of Chapter 1, Section 5, of the by-laws:

1. Birge, William Spafard, Provincetown, with remission of dues.
2. Chapin, Walter Henry, Springfield.
3. Cone, Dwight Eleazer, Fall River.
4. Hubbard, Josiah Clark, Holyoke, with remission of dues.
5. Sprague, Rufus William, Boston.

2. That the following named 3 Fellows have their dues remitted under the provisions of Chapter 1, Section 6, of the by-laws:

1. Barstow, Andrew Thaddeus, Boston.
2. Hardwick, Sydney Curtis, Maitland, Fla.
3. Markham, Erwin Walter, Lee.

3. That the following named Fellow be allowed to resign under the provisions of Chapter 1, Section 7, of the by-laws:

1. Anderson, Victor Vance, New York City, with remission of dues for 1924.

4. That the following named 29 Fellows be deprived of the privileges of Fellowship, under the provisions of Chapter 1, Section 8, of the by-laws:

- Blanchard, Randall Howard, Pittsfield.
Bostick, Warren John, West Springfield.
Brindamour, Joseph Edmond, Holyoke.
Brown, Roy Farrington, Washington, D. C.
Bunker, Henry Alden, Jr., formerly of New York City.

- Conlin, Matthew George, Worcester.
Ferguson, Edward Hugh, Dorchester.
Fish, Ralph Charles, Worcester.
Gleason, Benjamin Whittemore, Malden.
Hassett, Leonard Watson, Lynn.
Hoover, Clayton Elvin, Fitchburg.
Keenan, James Alphonsus, Roxbury.
Lacey, Henry Orlando, Somerville.
Lussier, Charles Arthur, Worcester.
McDavett, James John, Worcester.
Middleton, Willis Johnson, formerly of Quincy.
Morse, Nathaniel Niles, Mattapan.
Mulcahy, William Edward, Springfield.
Mullen, Walter John, Springfield.
O'Donnell, George Thomas, Dorchester.
Paul, Socrates James, Springfield.
Richardson, Cheslie Alvah Clarence, West Somerville.
Ring, Arthur Joseph, Lynn.
Roberts, Harry Lewis, Nova Scotia.
Rockwell, Llewellyn Harrison, Roxbury.

Stickney, Whitman Gibson, Beverly.
Sturgis, Benjamin Franklin, Jr., Salem.
Swift, Edith Hale, New York City.
Trueman, Nelson Gore, Salem.

5. That the following four Fellows be allowed to change their membership from one district society to another without change of legal residence, under the provisions of Chapter III, Section 3, of the by-laws:

Four from Norfolk to Suffolk.

1. Finkel, Henry Sumner, Brookline.
2. Kotler, Moses George, Dorchester.
3. Raeder, Oscar Jacob, Brookline.
4. Sisson, Warren Richards, Brookline.

DAVID N. BLAKELY, Chairman.

Dr. Blakely then submitted the report of his Committee on Finance, namely: "That the annual assessment for 1925 be \$8.00, the same as this year." The report and recommendation were adopted by vote. The Secretary read the petition of Alden R. Newhall, of Holliston, to be restored to the privileges of fellowship; on nomination by the President the following committee was appointed to consider the petition: D. F. Cummings, Natick; James Glass, Framingham; C. T. Warner, Marlborough. On nomination by the President this Auditing Committee was appointed: F. P. Denny, Brookline; G. Z. Goodell, Salem.

Dr. C. F. Painter, Chairman of the Committee on Medical Education and Medical Diplomas, reported progress on the undertaking given to his committee at the meeting of the Council last June, namely to investigate those medical schools in the Commonwealth whose diplomas do not entitle their owners to present themselves for examination for fellowship in the Massachusetts Medical Society. His committee had had some correspondence with the Middlesex Medical College, but the Boston College of Physicians and Surgeons had not replied to letters. He read copies of the letters sent and the replies received. No definite results had been arrived at, as yet. It was moved, seconded and voted that this be accepted as a report of progress.

Dr. A. P. Merrill, Chairman of the Committee to Consider the Control of the Sections at the Annual Meetings, said that as the Committee on Publications and Scientific Papers had presented an entirely new program for the scientific session for 1925 his committee thought it unnecessary to report at the present time.

The Secretary read a letter from Robert Underwood Johnson, Director of the New York University Hall of Fame, dated July 14, 1924, asking that the Society and persons outside the Society coöperate in undertaking to provide a bust of Oliver Wendell Holmes for the Hall of Fame at an approximate cost of \$3000. On motion by Dr. J. S. Stone it was Voted, That the President appoint a committee to consider obtaining a bust of Oliver Wendell Holmes for

the New York University Hall of Fame, and with power to act. In accordance with this vote the President appointed: J. W. Bartol, Homer Gage, E. C. Streeter.

Dr. J. S. Stone called attention to the remarks of the President as to the needs of the Society for more adequate headquarters and he Moved: That the President appoint a committee to consider the matter of establishing headquarters for the Massachusetts Medical Society and its officers and committees and for the editorial staff of the *Boston Medical and Surgical Journal*; that this committee be given authority to add to its membership and to confer with the officers and committees of the Boston Medical Library with reference to establishing headquarters in the Library Building or in any addition thereto; and that the committee report with its recommendations to the Council.

The motion was seconded and passed unanimously, the President appointing the following committee: J. S. Stone, W. P. Bowers, T. J. O'Brien, D. N. Blakely, M. Vassar Pierce, C. T. Warner, S. B. Woodward, Henry Colt.

Dr. T. J. O'Brien, Secretary of the Committee on State and National Legislation, reported on the hearing given by the Recess Committee of the Legislature on the bills to legalize chiropractic treatment, at the State House, September 24, 1924. He said that his committee had had only five days' notice, one of the days being Sunday; it being impossible to notify fellows through the official organ, the *Journal*, he had sent out a thousand postal cards. The hearing was a dignified protest against registering chiropractic; letters were read from leading educators, directors of life insurance companies, medical examiners and the Massachusetts Medico-Legal Society. He felt confident that the bills would not pass. The committee wished to express its appreciation of the moral support given by the Fellows of the Society and for their coöperation in opposing the bills in different sections of the state through personal pleas with the members of the Recess Committee. The President gave his personal thanks to the Secretary and the members of the Committee on State and National Legislation for the acceptable work they had done.

Dr. J. Forrest Burnham, one of the delegates to the House of Delegates, American Medical Association, read the report of the Massachusetts delegates to the meeting in Chicago, last June, written by Dr. H. G. Stetson, the senior delegate. (See Appendix No. 1.) The report was accepted by vote.

Dr. C. E. Morgan said that he considered the most important matter contained in the report to be that regarding periodic health examinations and that the Massachusetts Medical Society should take some action. The supplementary report of the Judicial Council had created a great sensation in the House of Delegates, it

being the first intimation that body had had that there was a scheme abroad in the United States that a large company, organized for profit, was using the ordinary physician as a means for acquiring money. He wished to sound a note of warning to all medical men against signing contracts with any commercial bodies. He thought it a serious question affecting all of the profession whether medical men should take up the matter of periodic health examinations, themselves, or should allow lay organizations, formed for profit, to do this work. He would like to have the report of the committee appointed by the Council, February 6, 1924, to consider uniform health examinations. The President said he believed that the report was ready, that although that committee was given authority by the Council vote to report progress in the columns of the *Journal*, he would try to get the report for the printed Proceedings of this meeting of the Council. (See Appendix No. 2.)

Dr. R. B. Osgood rose to a question of privilege to comment on a statement in the Report of the Committee on Advertising of and by Fellows, as presented to the Council last June. A member of the staff of the Children's Hospital, Boston, had been criticised for advertising. Dr. Osgood had investigated the facts in the case and found that the member in question had been imposed on by a reporter: that the advertisement about his clinic had been inserted in a newspaper without his knowledge; that in Dr. Osgood's opinion no blame should attach to him. Dr. W. B. Jackson, chairman of that committee, said that he had received a complaint about the member referred to from a Fellow in the center of the state, by way of the Secretary of the Society; that in the report he had referred to "a children's hospital," not "The Children's Hospital"; that reference to any hospital had been expunged from the printed Proceedings of the Council.

Dr. E. F. Cody referred to a committee appointed by the Council, June 12, 1923 "to consider, evaluate and report to the Society on projects involving the expenditure of public or private funds, projects which the medical profession of the State may be asked to endorse or may be expected to endorse." He had no recollection that that committee had reported as yet to the Council; such a committee, in his opinion, should be acting, or another committee appointed. The chair explained the difficulty of obtaining the service of Fellows who would be willing to undertake such a difficult task. By the resignation of the chairman first appointed and the subsequent appointment of a new chairman, October 3, 1923, the committee is, as at present constituted: Francis George Gurtis, José Penteado Bill, and Thomas F. Kenney.

Adjourned at 1.15 P. M.

WALTER L. BURRAGE, *Secretary*.

APPENDIX TO PROCEEDINGS OF THE COUNCIL

NO. 1

REPORT OF THE DELEGATES REPRESENTING THE MASSACHUSETTS MEDICAL SOCIETY AT THE ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION, HELD AT CHICAGO, JUNE 9-13, 1924

At this meeting your Society was represented by its full delegation of five members throughout the entire session. Two of the members received appointments to reference committees: Dr. Fred B. Lund to the chairmanship of the Committee on Medical Education, and Dr. C. E. Mongan as a member of the Committee on Sections and Section Work.

The report of the Secretary and of the Board of Trustees contained the usual summing up of work accomplished by the Association during the past year, together with a statement of the present physical and financial condition of the organization. These reports appear in full in the *Journal* of the Association and should be read by all members of this Society in order that they may have some idea of the wonderfully efficient plant owned by the Association and carried on the balance sheet as an investment of two-thirds of a million dollars. All of the meetings of the House of Delegates this year were held in this building.

The address of the President-elect, Dr. Pusey, caused considerable comment in the House of Delegates. This address was devoted almost entirely to the problem of medical education and was a plea for some means to bring about the proper and acceptable standard of education for an increased number of physicians at a lessened expense and a somewhat shortened period of study than now seems necessary. In his address he submitted the following proposition as offering an adequate preliminary training for the practice of medicine:

1. The present accredited high school education.
2. Three years of medical training.
3. A hospital internship of not less than a year and a half.
4. Proper selection of students, on the ground of fitness.

This, he states, would turn out practitioners in from four to four and a half years after leaving high school.

It was the feeling of a large number of the delegates that the adoption of such a plan as this would result in a definite lowering of the standards of medical education and it was doubtful in their minds if so radical and backward a step was necessary. They felt that the present standards of medical education had come too slowly and following too much hard work, to admit of any lowering of the standards at the present time. On the other hand, those delegates coming from the more sparsely settled districts felt that some modification would necessarily have to be made if the more remote country districts were to be adequately supplied with physicians.

The address of the retiring President, Dr. Wilbur, to the members of the House of Delegates, given on the day following that of the President-elect, was a model in its clearness, its forceful recognition of some of the large problems confronting the medical profession of the present day, together with some expressed thoughts as to the future of medical practice that were well worth careful consideration. Delivered in a clear, concise, forceful manner, without notes, no one present could fail to realize that these were words coming from a real medical leader.

A supplementary report by the Judicial Council, dealing with the relationship of the physician and the various organizations selling health insurance,

was deemed of sufficient importance to call for action under a special order of business. It was very clearly brought out by this committee that these organizations were buying the physicians' services at one price and selling such service to the individual examined, at a much higher price.

The following from this report may be of interest and may convey some information to members of this Council upon the subject of Periodic Health Examinations by Lay Organizations. (See pages 22 to 24 of the Proceedings of the House of Delegates, American Medical Association.)

This whole matter was considered in committee of the whole, who submitted the following resolution to the House of Delegates:

"Resolved, That the Committee of the Whole recommends to the House of Delegates that the practice outlined in the supplementary report of the Judicial Council be condemned as against the best interests of the public; and be it further

"Resolved, That the Judicial Council be instructed to carry on an educational campaign in conjunction with the constituent State associations and to cooperate with other Councils and Bureaus of the American Medical Association in the promotion of periodic health examinations by family physicians."

This year there was a reapportionment of the number of delegates from the various constituent State associations to the House of Delegates of the National Association. This new apportionment is carried out once in three years and was last carried out three years ago at the Boston meeting. At that time each constituent State association was entitled to one delegate in the National House for every 850 members or fraction thereof. By the new apportionment, as carried out this year, constituent State associations are allowed one delegate for each 950 members or fraction thereof. The new apportionment gives Massachusetts the same number of delegates in the National House of Delegates as before, namely, five.

The present membership of the House of Delegates is fixed by the constitution at 150, but an amendment to the constitution has been offered for action in 1925, increasing the number of delegates in the House to 175.

The report of the Council on Medical Education and Hospitals was, as usual, very complete, showing in detail the number of students now engaged in the study of medicine, the number of physicians already in practice, the opportunities for postgraduate medical instruction, etc.

To the older members of the House of Delegates there was a touch of sadness and a marked feeling of regret at the retirement from all official connection with the American Medical Association of Dr. Frank Billings. Dr. Billings has been constantly in office, in one capacity or another, for the past twenty-three years and has always been a tower of strength to the Association. A hard worker, an interested and zealous officer, a man of high ideals, always inspiring equally high ideals in all with whom he became associated, his influence will be greatly missed. Having reached the age of 70, he feels that the active burdens of the Association should be borne by other and younger men, and, for his own part, insists upon the retirement and quiet life to which, by virtue of his previously most active career, he is entitled. The kindest wishes of all go with him.

H. G. STERSON.

NO. 2

REPORT OF COMMITTEE ON UNIFORM HEALTH EXAMINATIONS

The committee appointed by the Council of the Massachusetts Medical Society, February 6, 1924, to consider and report upon Uniform Health Examinations submits the following report:

The committee believes that it is unnecessary to argue before medical men the value of the periodic health examinations. However, considerable publicity is necessary in order that the public may appreciate the value of periodic health examinations, and understand the necessary limitations of a health examination. Furthermore, the public must be educated to regard health examinations as a different procedure in many respects, especially in regard to the physician's charges, from ordinary office visits.

The committee has had before it a large amount of data bearing upon physical examinations, including the various forms already in use, such as those employed by life insurance companies, industrial organizations, school and college authorities, public and pay clinics, certain practitioners, etc. The committee finds, however, that these excellent standard procedures which have been evolved to meet specialized conditions in particular groups do not lend themselves to ready utilization by the average practitioner in general practice, and therefore do not meet the needs of the medical profession in general or the general public.

It must be obvious that any proposed plan should be general in scope, should permit of considerable elasticity, and should be expressed in terms of minimum requirements. The committee does not desire to set up an exact standard which will in any way hamper the excellent work now being done by specialized groups or by individuals. Many physicians make a strong and desirable appeal to the general public and to the profession by a very complete standard of physical examination which includes examinations by specialists and by sundry laboratory procedures. Such examinations demand facilities which the average practitioner does not possess. There is reason to believe that there are ample opportunities for both rich and poor for the most elaborate details of physical examination, provided there are indications. It is believed that the inclusion of elaborate details in any general plan for physical examination would at once spell failure. It is to be understood that, provided there are indications, the proposed plan of the committee will be extended to meet those indications, but in general the committee believes that unless the profession at large can and does carry out health examinations the real object of health examinations cannot be obtained.

While it is true that in some of the more elaborate plans for conducting physical examinations several specialists participate in each physical examination, the committee feels strongly that as a general policy it is much sounder if the examined individual is regarded as an entity by one physician rather than as a collection of segments, with each of these segments a province of a different physician. While there is a strong tendency on the part of the general public to consult a dentist, an oculist, or a nose and throat specialist quite independently of the physician who looks after their general health, nevertheless it is constantly becoming more evident that apparently local disturbances in the teeth, eyes and throat have general constitutional significance. The committee would like to see the general practitioner in rather more complete charge of his patients both in illness and in health, not because it might seem to be of benefit to the physician but because the committee believes that it would be of great benefit to the patient.

The committee believes that the medical profession by adopting the principle of health examinations also undertakes a considerable responsibility. The committee believes that the medical profession is and must be the very foundation stone of public health, and is inclined to look askance at certain tendencies to separate widely the functions of curative medicine and preventive medicine. There will, of course, always be specialists and leaders, but the

general practitioner should practice preventive medicine as he practices curative medicine. It is of course true that the general practitioner in practicing preventive medicine must readjust his viewpoint just as he does in practicing within the types of curative medicine. It will be necessary for the general practitioner carrying out health examinations to collect his data and to interpret his data with a somewhat different viewpoint from that with which he approaches a case of illness. It is also true that the healthy person seeking health examination approaches the physician with a very different viewpoint from that of a sick person seeking relief from certain ailments. It will be necessary for the profession to think more than is their custom in terms of normal standards and of early symptoms and signs, and to adopt other procedures of investigation, interpretation, and subsequent advice and treatment than perhaps has been their habit. For example, the physician conducting physical examinations among the apparently healthy must be cognizant with the variations in blood pressure; he should, without perhaps undue worship of fixed height and weight ratios, be familiar with the normal range of weight for given heights at given ages; he should be prepared to give advice as to actual food requirements in the individual case; he should have definite information concerning common cardiac irregularities and their significance; he should have sufficient knowledge of common skin conditions, for example, acne; the common orthopedic conditions, for example, pronated feet; and similarly of the other specialties, so that at least these conditions be recognized even if a given physician does not elect to treat them.

In health examinations it is perhaps peculiarly important for the physician to exercise caution in making hasty deductions from physical findings. The finding of sugar in a single specimen of urine may not mean diabetes. In an apparently healthy individual it is often wise to check up pathological findings, especially blood pressure, urine and Wassermann reactions.

The committee does not want to fix arbitrarily any standard of procedure for the profession. However, it feels that it is wise to make certain concrete suggestions which should be interpreted as suggestions and illustrations. It is obvious that any form of physical examination means a considerable expenditure of time on the part of the physician. For the good of the movement for physical examinations and for the security of the physician these physical examinations should be carried out with some deliberation. The committee believes that the physician should be prepared to devote an hour to each first physical examination. In actual operation, in private practice, it not infrequently happens that one hour is not sufficient to permit of a complete discussion of the findings on the physical examination. For such cases additional appointments must be made, presumably at some future date. The charges for physical examinations should of course be made on a somewhat different basis than is ordinarily the custom of physicians in their usual office charges. Naturally these charges vary. The committee merely desires to point out for the protection of the physician that it is desirable to have a full understanding of the financial aspects and the basis on which charges are to be made, whether it is by time or by the examination. Experience indicates that the public accepts very readily such modifications of the physician's charges provided they are accompanied by an explanation.

The committee is in some doubt about the desirability of suggesting standard forms. Of course, the physical examination, in order to be of real value, must be recorded in some permanent form. The committee is fully cognizant of the difficulties of the practitioner with his records. It is obviously desirable, if a physician has built up some satisfactory

method of keeping his records, that the physical examination record should be incorporated into his present system. It is always annoying to have material for filing which does not conform to the existing system. It must always be remembered that, after all, forms and records are only devices, that they are only of value for the material that they contain, and are only a means to an end. The committee has been over, and with much care, many forms. The committee is inclined to be very sceptical as to the value of some of these elaborate forms, because it seems likely that real important data might well be lost in the maze of unimportant details. Then, too, these formidable forms are designed to meet an entirely different situation than that with which the committee is concerned. In the case of many elaborate forms the person collects the data in relatively an impersonal way, and the data go through various hands for interpretation. In the problem before us the collection of the data and the interpretation will be immediate and personal. Consequently the committee recommends a much more skeletonized and general type of form than that ordinarily advocated.

The committee at one time attempted to include in this report so-called normal standards, such as height and weight tables, normal variations of blood pressure, etc., and also standard procedures, such as the method of taking the blood pressure, methods of urine analysis, etc., and also certain possible helpful information, particularly in regard to diets. After much consideration these features are omitted. It was thought wiser to make the report as simple as possible, and not to extend the activities of the committee into the realm of the production of a handbook. It is the opinion of the committee that after some experience a good many changes will be found desirable, and possibly at that time some sort of a handbook may be useful to the members of the Society. The committee is inclined to the belief that the most desirable form for recording the physical examination is upon a standard card with a fly leaf duplicate with carbon paper between. The physician will then make one record. He will have a card for his own files and can, if he chooses, give a copy to the patient. The committee recommends the publication of such forms by the Society and the sale of these, at cost, to the members of the Society.

For the purpose of clarification the committee presents a brief comment on the appended form. The committee recommends a general heading of Family History, under which the salient facts as to father, mother, brothers, sisters, husband, wife and children and their ages and deaths and causes of death should be recorded, but without elaboration except under special circumstances. Likewise under Previous History the committee believes that for general purposes Illnesses, Accidents, and Operations are adequate headings. The committee believes that it would be desirable to have a general heading for Occupational History, for Social History and for Habits. Under Habits would be included not only tea, coffee, tobacco and alcohol, but sleep, exercise, diet, and bowels. For Women a special heading for Catamenia should be added. The next heading should be the Present Status, or, in ordinary terminology of medical case history, present illness. Here it seems to the committee is of paramount importance that as in cases of illness there should be featured the presenting symptom of the chief complaint rather than allowing that to be overshadowed by a multitude of details. It is the experience of very highly organized clinics with standard forms that occasionally the patient, although asked all of the questions on the elaborate form, is never asked the question which to him seems the most vital, namely, "What do you actually complain of?" or "Why did you come to see the doctor?" It seems to the committee to be essential that if the patient feels perfectly well and comes

merely for general overhauling that such a simple statement should be baldly recorded. Of course, under the heading of Present Status a survey of the various physiological systems to ascertain disturbances and possibly important symptoms should be included. Obviously tendencies to colds and the maximum weight with date should also be recorded.

The committee finds perhaps most perplexing any standardization of the physical examination. The committee presents with some hesitation only simple headings, as will be seen on the form. After considerable discussion the committee voted to put the Wassermann reaction upon the form—not that the committee thought that necessarily the Wassermann reaction ought to be done in every case, but rather that the Wassermann reaction should be performed as a part of a routine physical examination much more often than is done at present. The State Board of Health and some local Boards of Health perform the Wassermann reaction without charge and furnish the necessary containers. The only equipment needed by the physician is a small syringe and needles.

The minimum equipment needed by the physician for the conduct of these health examinations consists of scale with measuring rod, a Snellen's eye chart, tongue depressors, stethoscope, blood pressure apparatus, Tallquist scale, with a needle, nitric acid, with a wine glass, Benedict's solution (or Fehling's solution). Many physicians will want in addition glass slides and cover slips, a blood stain, such as Wright's blood stain, blood counters, blood counting solutions, a microscope and centrifuge. Again, it is urged that in the presence of positive indications more elaborate procedures will be required. The simple basic physical examination should be regarded as the foundation stone upon which, when necessary, many more elaborate procedures can be placed. For example the presence of cough with sputum, even with negative chest findings, is obviously an indication for the examination of the sputum, and perhaps for an X-ray of the chest.

However, experience has shown that if these health examinations are actually examinations in health and are for the purpose of detecting early disease, the large proportion of individuals coming for physical examination should be found organically sound.

Finally the committee would like to stress again the importance of hygienic advice, or advice concerning the general rules of hygiene. Nearly all individuals, most of whom, of course, will be organically sound, will have a varying number of hygienic errors.

SUMMARY

The committee presents a plan for physical examination.

The committee recommends the printing of the form by the Society for sale, at cost, to members.

The committee recommends that the Society and the District Societies energetically foster the movement for health examinations by meetings, committees and publicity.

The features of an adequate health examination that seem to the committee especially important are:

1. A permanent record.
2. Ample time for the examination.
3. A careful history of the individual case.
4. Examination of the patient without clothing.
5. A thorough review of the findings of the history and physical examination.
6. Careful and explicit advice to each individual patient, with adequate appreciation that organic soundness is often associated with marked functional disturbances.
7. Utilization of the interview after the physical examination for the instruction in the simple rules of hygiene.
8. Encouragement to the patient to report periodically for reexamination, ordinarily at the end of the year, and always at the onset of striking symptoms, particularly losses or gains of weight, persistent cough, etc.

9. Adequate remuneration for services.

ROGER I. LEE, *Chairman,*

W. P. BOWERS,

J. P. BILL,

F. H. BURNETT,

R. B. BUTLER,

J. B. O'CONNOR,

A. R. CHANDEL,

KENDALL EMERSON,

W. O. HEWITT,

J. S. STONE,

Committee:

Name _____	Date _____	Occupation _____
Family History _____		
Previous History _____		Social History _____
Illnesses _____		
Accidents _____	Habits _____	
Operations _____	(Women) Cta. _____	
Present Status _____	Special symptoms _____	

PHYSICAL EXAMINATION

Age: Yrs. _____	Mos. _____	With	With
Color _____		Height: Without shoes _____	Weight: Without clothes _____
Scars _____		General Appearance _____	
Posture _____		Feet _____	Hair _____
Eyes: R. _____	L _____	Glasses: R. _____	L _____
Tongue _____		Teeth _____	Gums _____
Ears _____		Hearing _____	
Heart _____			Pulse rate _____
Lungs _____			B. P. _____
Abdomen _____	Hernia _____	Genitalia _____	Hemorrhoids _____
Varicose veins _____		Glands _____	
Urine Examination _____			
Hgb _____		Wassermann reaction _____	
Summary _____			
Advice _____			

ORIGINAL ARTICLES

CHOLESTEROL CONTENT OF BILE IN HEALTH AND DISEASE

II. THE CHOLESTEROL CONCENTRATION OF DUODENAL CONTENTS DERIVED FROM NORMAL PERSONS AND FROM THOSE WITH DISEASE BOTH OF HEPATIC AND NONHEPATIC ORIGIN

BY C. W. MCCLURE, M. D., AND ELDORA VANCE, B.S.C.

[From the Evans Memorial, Boston]

The present communication reports results obtained in a study of the cholesterol concentration of duodenal contents derived from apparently healthy persons, those suffering from diseases not involving the liver and those with some well established type of disease affecting either the liver substance or its ducts, including the gall bladder.

In a previous publication¹ describing a method for estimating cholesterol in duodenal contents it was remarked that the development of procedures giving wholly objective findings might place the examination of duodenal contents on a more usable basis; and the present report is another step. As Fitz² remarks, the duodenal contents furnish bile for clinical examinations. But his own examinations of gall bladder bile, obtained from gall bladders removed at laparotomy, were such that he questions the value of the findings in duodenal bile. However, it is well established that the gall bladder has functions peculiar to itself; one of which is the absorption of the water content of bile and its consequent concentration. Variations in the rate or degree of water absorption would produce corresponding differences in the cholesterol concentration of gall bladder bile. Thus, examinations of gall bladder bile might not give results comparable with those obtained by the examination of duodenal bile. Another function of the gall bladder, regarded as its chief one by some,³ is to equalize pressure within the system of hepatic ducts. If this is the chief function of the gall bladder, then it is probable that bile found in the duodenum has come very largely directly from the liver, and has not passed through the gall bladder; and remains, therefore, unaffected by its function or dysfunction. These observations make it theoretically possible that condemnation of duodenal examinations, when based on the findings in gall bladder bile, is not entirely justifiable. For this reason the present authors have continued investigations of various constituents of the biliary fraction of duodenal contents, determining comparative relationships in health and disease.

METHOD OF PROCEDURE

Duodenal contents were obtained by means of the duodenal tube. The tube was swallowed in the morning before food or liquid had been taken. The tip of the tube was allowed to pass into the second portion of the duodenum, where its position was ascertained by fluoroscopy.

Then, with the patient reclining on the right side, 60 c.c. of 33 per cent. solution of magnesium sulphate were poured through the tube and the proximal end of the tube closed with a clip. After a five minute interval the contents of the duodenum were allowed to siphon off; and as soon as definitely yellow material was obtained, collection of duodenal contents was begun and continued for a period of thirty minutes. The cholesterol concentration of the duodenal contents was determined by the method¹ already described, while the shade and color were estimated grossly by the unaided eye. The term cholesterol index, used in the descriptive part of this article, is a method of arbitrarily expressing the number of milligrams of cholesterol per 100 c.c. of duodenal contents.

The results obtained from the study of the duodenal contents of control subjects and patients are outlined in the following table.

CHOLESTEROL INDEX AND COLOR OF DUODENAL CONTENTS FROM NORMAL PERSONS AND FROM PATIENTS WITH DISEASES WHICH DO AND DO NOT AFFECT THE LIVER

Diagnosis	No. of Subjects	Choles- terol index	Color
Normal	12	25 to 34.2	Brownish yellow
"	2	Trace	Pale yellow
Diseases not affecting the liver	21	25 to 50	Brownish yellow
"	1	23	" "
"	2	20 to 21	" "
"	3	16 to 19	Pale yellow
Chronic cholecystitis	12	0 to 16	Pale yellow
"	1	16	Mahogany brown
"	2	57 to 78.4	" "
Catarrhal jaundice	6	0 to 13	Colorless or pale yellow
Cirrhosis of liver	2	0 to 12.7	Pale yellow
"	1	None	Light brownish yellow
Cancer common bile duct	6	None	Colorless
Cancer liver	1	6.0	Pale yellow
Hodgkin's Disease	1	6.9	Pale yellow

DESCRIPTION OF THE TABLE

Fourteen apparently normal, or control, subjects were studied. In the duodenal contents of twelve of these the cholesterol index varied from 25 to 34.2 mgms., and the color was found to be brownish yellow. In two of the apparently normal subjects the duodenal contents were very pale yellow in color and contained only traces of cholesterol. Thus, 85 per cent. of normal duo-

duodenal contents showed a fairly uniform cholesterol index and appeared to be of the same shade of color; i. e., brownish yellow.

Duodenal contents were obtained from twenty-six patients with various functional or organic conditions not known to affect the liver. In twenty-four of these the color was brownish yellow and in twenty-one the cholesterol index varied from 25 to 50 mgms. In one the index was 23 mgms., and in two it was 20 and 21 mgms. In the two remaining patients the duodenal contents were of pale yellow color and the cholesterol index was 16 and 19 mgms. The diagnoses in these two patients were spinal arthritis and gastrointestinal neurosis resulting from over-work, respectively. Thus, the findings in the duodenal contents of these twenty-six patients showed a cholesterol index varying from 23 to 50 mgms., in twenty-two, or 84.6 per cent., and were brownish yellow in color in twenty-four, or 92.3 per cent. These percentages approximate those found in the duodenal contents of apparently normal persons.

Duodenal contents of 14.3 per cent. of the apparently normal subjects and of 15.4 per cent. of the patients without liver disease showed cholesterol indices less than 23 mgms.; while 14.3 per cent. of the apparently normal subjects and 9.7 per cent. of these patients yielded duodenal contents of pale yellow color.

The findings, discussed above, permit the deduction that duodenal contents of about 85 per cent. of persons without liver disease will show a cholesterol index of from 23 to 50 mgms., and the duodenal contents of nearly 90 per cent. will be brownish yellow in color; when obtained by the technic described.

Duodenal contents were obtained from fifteen patients in whom the diagnosis of chronic choleystitis was made. None of the patients was jaundiced. The diagnosis was confirmed at laparotomy in five of the patients, gall stones were recovered from the feces in one, and X-ray shadows typical of gall stones were found in two others. The duodenal contents from thirteen of these patients showed cholesterol indices varying from zero to 16 mgms., and in twelve of these the color was pale yellow; in the thirteenth patient the cholesterol index was persistently about 16 mgms., and the color mahogany brown. This patient refused operation and the diagnosis was not confirmed. In two, the color of the duodenal contents were unusually dark brown (mahogany brown) and the cholesterol indices 78.4 and 57 mgms., respectively. Both of these patients were operated upon; gall stones were found in one, while chronic choleystitis with hepatitis was present in both.

Duodenal contents were obtained from six patients with catarrhal, or infectious, jaundice. The cholesterol index and color of these contents were found to vary with the stages of the

diseased process during which collections were made. In the early stages the cholesterol index varied from zero to 13 mgms., and the duodenal contents were colorless or pale yellow. During convalescence the cholesterol index rose to 20 mgms. or more, and the duodenal contents finally became yellowish brown.

Duodenal contents were obtained from three patients with cirrhosis of the liver. Two of the patients were not jaundiced and there was no ascites. In the duodenal contents of one of these there was no cholesterol and the color was pale yellow. In the other the duodenal contents were light yellow and the cholesterol index was 12.7 mgms. The third patient represented an advanced stage of luetic cirrhosis, with both jaundice and ascites. The duodenal contents of this patient were brownish yellow in color but there was no cholesterol found.

Duodenal contents were obtained from a patient with Hodgkin's disease whose liver was greatly enlarged. The contents showed a cholesterol index of 6.9 mgms. and were pale yellow in color. Almost identical findings were obtained in the duodenal contents of a patient with cancer of the liver secondary to that of the stomach. In this patient the larger bile ducts and gall bladder were not involved and there was no jaundice. The diagnosis of this case was confirmed on laparotomy. On the other hand, colorless duodenal contents without cholesterol were obtained from six patients in whom there was cancerous occlusion of the common bile duct. The diagnosis of these cases was confirmed by laparotomy or autopsy.

SUMMARY AND DISCUSSION

The results obtained from the study of duodenal contents from fourteen apparently normal subjects and twenty-six patients "without demonstrable hepatic involvement" showed that the cholesterol index varied from 23 to 50 mgms. in 85 per cent. and were dark brownish yellow in 90 per cent. The great predominance of these figures for cholesterol concentration and of the brownish yellow color allow them to be used as arbitrary normal standards. It is possible that the patients whose findings deviated from these arbitrary normal standard had some type of biliary involvement. But, in the light of our present knowledge, it cannot be held legitimately that two healthy students with entirely negative medical findings had either organic or functional liver disturbance. The magnesium sulphate solution was given to each student on two different days, the same result being obtained on both occasions. It, therefore, is concluded that magnesium sulphate stimulated the liver but slightly, if at all, in these two subjects. This finding demands caution in the interpretation of results obtained from examinations of duodenal contents derived after the use of magnesium sulphate

lavage. However, all of the thirty-two patients with some type of liver involvement showed findings very different from those of the arbitrary normal standards. In twenty-eight of these patients the cholesterol index was less than 70 per cent. of the lowest level of the arbitrary normal standard and in two it was well above the upper limit of this standard. In all the color was definitely different from the arbitrary normal; it was pale yellow in twenty three, mahogany brown in three and colorless in the six patients in whom the common duct was occluded by cancer. From these findings it seems warranted to conclude that an abnormal cholesterol index and an abnormal color of the bile of duodenal contents frequently accompany lesions of the biliary system.

Pale yellow duodenal contents in the presence of chronic cholecystitis have been reported sufficiently often to be regarded as a characteristic finding; while both White⁵ and Jones⁶ mention unusually dark brown contents in such cases. The low index of cholesterol concentration accompanying the pale yellow duodenal contents of the thirteen patients reported here adds another finding common to chronic cholecystitis.

Both the low cholesterol index and the pale yellow color may be ascribed to occlusion of the cystic duct, as has been commonly done by various past investigators. However, other factors must be considered which could give rise to both the phenomena under discussion. The most obvious of such factors are (1) dilution of the bile

in the duodenum by material coming from either the stomach or pancreas, (2) secretion of diluted bile by the liver, (3) failure of the magnesium sulphate adequately to stimulate the flow of bile, (4) the secretion of abnormal bile pigments associated with the inability of the liver to concentrate cholesterol in its biliary secretion. Obviously the true explanation for either the pale yellow color of duodenal contents or of its low cholesterol concentration is beyond the scope of the present investigation or of those thus far published.

CONCLUSIONS

1. Duodenal contents obtained after lavage of the duodenum with 33 per cent. magnesium sulphate solution show an index of cholesterol concentration between 23 and 50 mgms. in 85 per cent. and are of brownish yellow color in 90 per cent. of persons without involvement of the liver or its ducts.

2. The duodenal contents of patients with some form of involvement of the liver or its ducts, including the gall bladder, commonly show a cholesterol index much below 23 mgms., and are frequently of pale yellow color.

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CHOLESTEROL IN THE BILE IN HEALTH AND DISEASE

III. EFFECT OF MAGNESIUM SULPHATE LAVAGE ON CHOLESTEROL CONCENTRATION AND COLOR OF DUODENAL CONTENTS, AND ON THE SYMPTOMATOLOGY OF PATIENTS WITH BILIARY TRACT DISEASE

BY C. W. MCCLURE, M. D., AND ELDORA VANCE, R.S.C.

[From the Evans Memorial, Boston]

THE present communication reports the principal results obtained from a study of the duodenal contents of patients with biliary tract disease after lavage of the duodenum with magnesium sulphate solution. The duodenal contents were examined for changes in cholesterol concentration and color. Incidentally, a comparative study was made of the relation of the clinical progress of the patients to changes found in the duodenal contents.

The method of procedure in the present investigation was similar to that reported in the second study on Cholesterol in Health and Disease¹, and the same arbitrary normal standards will be used; i. e., the normal index of cholesterol concentration will be considered as between 23 and 50 mgms., and the normal color as brownish yellow. The lavage with magnesium sulphate solution was performed once or twice a week.

as governed by the patient's tolerance to the drug and his convenience to the time of lavage.

Six patients with catarrhal (infectious) jaundice were studied; and the results obtained are exemplified by tabulating those from the study of one of these patients (Table 1).

The patient, whose findings are tabulated above, had been jaundiced for three weeks before the first duodenal contents were obtained. The table shows that the duodenal contents began to deepen in color during the sixth week of the jaundice and after the ninth week remained brownish yellow. Cholesterol appeared in measurable quantities in the seventh week and increased during the next three weeks. With the appearance of cholesterol the urine becomes free from bile and the patient's subjective symptoms disappeared. The table illustrates the increase in concentration of bile of duodenal contents

TABLE 1

FINDINGS IN DUODENAL CONTENTS AND PROGRESS OF A PATIENT WITH CATARHAL JAUNDICE, DURING LAVAGE OF DUODENUM WITH MAGNESIUM SULPHATE SOLUTION

Date	Index of cholesterol concentration in mgms.	Color of duodenal contents	Amount in c.c.	Symptoms
2/6/33	0.0	Moderate green yellow	100	Deep jaundice
2/10	0.0	Light "	60	Jaundice clearing
2/14	0.0	" "	150	Bile in urine
2/17	0.0	" "	100	" " "
2/20	0.0	Greenish yellow	75	
2/24	0.0	" "	40	No bile in urine
2/27	7.5	" "	75	
3/3	8.3	Brownish yellow	60	
3/6	Trace	Light yellow	100	Icterus disappeared
3/13	22.7	Brownish yellow	100	
3/20	19.8	" "	60	
3/27	19.0	" "	100	
4/3	18.7	" "	60	
4/10	20.0	" "	60	

which occurs when the disease progresses favorably.

Thirteen patients were studied in whom the diagnosis of chronic biliary tract disease was made. All these patients presented histories describing typical symptoms of gall stone colic. Two had been operated upon about ten years previously and gall stones were found, but the gall bladder had not been removed. The diagnosis of chronic cholecystitis was confirmed on laparotomy in a third patient. Gall stones were recovered from the stools of a fourth patient. X-ray plates showed apparent gall stone shadows in a fifth patient. In two other patients jaundice had been associated with periods of attacks of gall stone colic. The diagnosis of chronic cholecystitis was not confirmed by operative procedures in the remaining six patients, neither had jaundice occurred. However, the attacks of pain were so characteristic of gall stone colic as to make the diagnosis of chronic biliary tract disease seem almost certainly correct. At the time duodenal lavage was commenced none of the patients was jaundiced; nine of the patients complained of persistent and frequently recurring attacks of biliary colic over a period of a few weeks to several months, three of severe dyspepsia and one of recurring attacks of jaundice.

The findings in the duodenal contents after repeated lavage with magnesium sulphate solution, together with the clinical progress of a patient whose presenting symptom was biliary colic, are outlined in the following table (Table 2). The findings are representative of those obtained during the favorable progress of such a condition.

Study of the above table shows a progressive increase in the index of cholesterol concentration each week, although the color remained unchanged. However, in some of the patients the color of the duodenal contents eventually

changed from pale yellow to brownish yellow. The table shows further that accompanying the increase in cholesterol concentration the pain ceased during the third week and no symptoms were present after the fifth week. This patient

TABLE 2

FINDINGS IN DUODENAL CONTENTS AND PROGRESS OF CASE OF GALL STONE COLIC DURING LAVAGE OF DUODENUM WITH MAGNESIUM SULPHATE SOLUTION

Date	Index of cholesterol concentration in mgms.	Color of duodenal contents	Amount in c.c.	Symptoms
5/15/33	0.0	Light yellow	90	Colic all week
5/23	—	" "	60	Colic all week
6/4	5.0	" "	75	One attack colic
6/11	10.0	" "	100	No pain
6/18	15.0	" "	90	Dyspepsia
6/25	—	" "	85	No symptoms
7/2	—	" "	50	" "
7/9	24.0	" "	70	" "
7/19	24.0	" "	60	" "

has remained free from biliary symptoms for a year. In similar manner, three other patients were relieved from pain and dyspepsia, while the two others with biliary colic were decidedly improved. The three patients with dyspepsia, but without colic, were entirely relieved.

The pain of three of the patients was uninfluenced by the treatment. However, one of these patients refused lavage after the fourth week, which leaves some doubt as to what the result of more lavage would have produced. During seven weeks of lavage, the duodenal contents of the second patient were persistently abnormally dark brown in color and the index of cholesterol concentration remained about 16 mgms., an abnormally low figure. Although suffering much pain, this patient refused both further lavage and operation. The duodenal contents of the

third patient showed indices of cholesterol concentration varying from 17 to 57 mgms., without time relation to the number of duodenal lavages. The color of the duodenal contents was persistently abnormally dark brown. At laparotomy there was extensive per hepatitis and the gall bladder was buried in adhesions and did not contain stones. After its removal, gross inspection showed the gall bladder to be but slightly diseased and its bile contents appeared to be normal.

Table 3, which follows, illustrates both an increase in cholesterol concentration and in the change in color from light yellow to brownish yellow, which may follow the repeated lavage of the duodenum with magnesium sulphate solution.

TABLE 3

Findings in Duodenal Contents and Progress of Case of Patient with Recurrent Attacks of Jaundice Due to Chronic Cholecystitis, During Lavage of Duodenum with Magnesium Sulphate Solution

Date	Index of cholesterol concentration in mgms.	Color of duodenal contents	Amount in c.c.	Symptoms
3/14/23	16.4	Light yellow	80	None
3/19	Trace	Light brownish yellow	100	"
3/26	—	"	60	"
4/1	15.7	"	20	"
5/6	33.0	Brownish yellow	60	"
5/13	20.0	"	70	"

The patient, whose findings are outlined in Table 3, had had attacks of moderately deep jaundice recurring regularly at alternating intervals of three and six months for several years. The earlier attacks had been accompanied by severe biliary colic. Duodenal lavage has been given this patient about every six months for the past three years; during which time there has been no jaundice or other symptoms referable to disease of the liver. The last series of lavages given this patient are outlined in Table 3.

The findings show that it was four weeks before the index of cholesterol concentration and the color conformed to the arbitrary normal standards.

Three patients were studied whose gall bladders had been removed. At laparotomy chronic cholecystitis had been found, associated with gall stones in two and biliary sand in one. Duodenal lavage was commenced in the latter patient three weeks following an attack of hepatic fever with jaundice, to which attacks the patient had been subject at occasional intervals during the five years subsequent to his operation. At the time lavages began the patient was no longer jaundiced, but some dyspepsia persisted. The dyspepsia, and an attack of colic during the fifth

week of lavage, completely disappeared after the eighth lavage and the patient was well six months later. The findings in the duodenal contents of this patient are outlined in the following table (Table 4).

TABLE 4

Findings in Duodenal Contents and Progress of Case of Patient Whose Gall Bladder Had Been Removed and Who Had Recurrent Attacks of Hepatic Fever and Jaundice During Lavage of Duodenum with Magnesium Sulphate Solution

Date	Index of cholesterol concentration in mgms.	Color of duodenal contents	Amount in c.c.	Symptoms
1/3	35.1	Light yellow	60	Slight dyspepsia
1/8	35.7	"	35	"
1/16	35.7	"	40	"
1/22	34.2	Yellow	30	"
1/29	34.5	"	60	"
2/5	12.4	Light yellow	60	Colic during
2/12	18.5	Yellow tinge brown	60	No colic [week]
2/26	20.2	"	60	Some dyspepsia
3/4	16.2	"	60	No symptoms
3/9	36.6	"	20	"

The table shows a marked diminution in the cholesterol concentration associated with biliary colic. Following this, it was three weeks before the index of cholesterol concentration reached its usual level. It will be noted that the color was not the brownish yellow of the arbitrary normal at any time, although it occasionally assumed a brownish tinge.

The second patient was seized with gall stone colic and jaundice three months after the gall bladder had been removed. The pain and jaundice disappeared after three weeks, and then duodenal lavage was begun and continued for eight weeks. During this period the index of cholesterol concentration was usually about 10 mgms., but reached 21.7 mgms. on one occasion. The color of the duodenal contents gradually changed from light yellow to a deeper yellow tinged with brown. The patient was free from symptoms throughout the time of lavage and had remained so six months later.

The third patient was seized with frequently recurring daily attacks of severe gall stone colic within a few days after operation, in which the gall bladder had been removed, and this colic persisted for six weeks and up to the day lavages were begun. During the first four weeks of lavage the pain occurred but once each week and was of short duration. The patient then became entirely free from pain. The color of the duodenal contents of this patient gradually changed from light yellow to golden yellow, which eventually assumed a tinge of brown. The index of cholesterol concentration varied without relation to the number of lavages. It was usually

between 10 and 13 mgms., but after the fourth lavage it occasionally rose to values between 17 and 24 mgms., and on one occasion it was 34.7 mgms. This patient was given duodenal lavages at biweekly intervals for two months and then at weekly intervals for two months. After becoming free from symptoms the patient has remained so three months later.

DISCUSSION

In a former publication¹ an arbitrary normal index of cholesterol concentration of from 23 to 50 mgms. and an arbitrary normal color of brownish yellow were established for duodenal contents. Similar findings eventually developed, following repeated lavages with magnesium sulphate solution, in the duodenal contents of patients in whom at first the index of cholesterol concentration was much below 23 mgms. and the color was pale yellow. In the contents from these patients the normal color and index of cholesterol concentration, which eventually developed, were found to be maintained after having once been reached, provided the patient remained free from symptoms. Similar findings were made in three subjects without demonstrable biliary disease and whose duodenal contents were obtained on six to ten occasions. Furthermore, during convalescence from catarrhal jaundice the duodenal contents eventually conformed to the arbitrary normal standards. On the basis of these findings, indices of cholesterol concentration showing variations much below 23 mgms., or duodenal contents not of brownish yellow color, are considered to be abnormal.

It will be noted that, in two patients whose gall bladders had been removed and in those patients with chronic cholecystitis who were not relieved of symptoms by duodenal lavage, the indices of cholesterol concentration did not conform to the arbitrary normal index. In these patients either the index was extremely variable and often below the arbitrary normal or it was persistently low. It will be noted, further, that the color of the duodenal contents of these patients differed from the arbitrary normal standard color. For this reason, the biliary fraction of the duodenal contents of these patients is considered to be abnormal.

The question now arises as to the cause for these abnormalities. The yellow color of duodenal contents has usually been ascribed to lesions occluding the cystic duct. But it seems scarcely probable that duodenal lavage would open up an occluded cystic duct; nevertheless, pale yellow contents often eventually changed to brownish yellow after repeated lavages. Also, the index of cholesterol concentration in the contents of these patients eventually increased to normal, and it was normal in a patient whose gall bladder had been removed. (Table 4). Thus, it seems that the gall bladder is not the

main factor controlling the cholesterol concentration or the color of duodenal contents. Other possible factors are dilution of the duodenal contents with pancreatic or gastric juice. However, pale yellow duodenal contents show but little enzymic concentration, and this indicates the presence of only a small amount of pancreatic juice. The gastric factor is more difficult to rule out. But after duodenal contents had acquired the arbitrary normal characters, they often maintained them. Since there is no special reason to expect differences in the quantity of gastric secretion, it is probable that this fluid did not play an important role as regards dilution of the bile of duodenal contents. These findings indicate that neither occlusion of the cystic duct nor pancreatic or gastric dilution is the usual cause of abnormalities found in the biliary fraction of duodenal contents. By exclusion, therefore, these abnormalities may be attributed to disturbances in the function of the liver. However, data afforded by the present investigation do not conclusively prove this. But the view gains some support from the findings in the duodenal contents from patients with catarrhal (infectious) jaundice. In this condition bile was found to disappear from the urine and the patient's subjective symptoms cease before the duodenal contents became normal. At this stage it is considered that no obstruction to the biliary ducts was present, and that abnormalities in the bile of duodenal contents were the result of disturbed liver function. This view has been expressed by Jones and Minot².

The discussion presented in the foregoing paragraph bears directly on the explanation of the role played by magnesium sulphate in producing the changes which developed in duodenal contents following lavage with magnesium sulphate solution. It will be recalled that both the cholesterol concentration and color of duodenal contents frequently changed from distinctly abnormal to more nearly normal during lavage of the duodenum with magnesium sulphate solution. If the abnormalities of duodenal contents were the result of disturbed liver function, then their correction after lavage with magnesium sulphate may be attributed to an effect on liver function. The findings, therefore, permit the inference to be drawn that lavage of the duodenum with magnesium sulphate solution in some way exerts a favorable influence on the functional state of the liver.

A total number of fifteen patients with biliary tract disease, exclusive of six with catarrhal jaundice, received duodenal lavage with magnesium sulphate solution. The only selection exercised in choosing the patients for observations was in relation to the definiteness of their presenting symptomatology. Of these patients, it can be stated with certainty that eight became completely relieved of symptoms and two im-

proved during the period of duodenal lavages. These patients had been suffering from symptoms a few weeks to many months before lavages were commenced. Thus, the relief experienced would seem to have been the result of the duodenal lavages.

Other observers³ have reported favorable results from duodenal lavage of the duodenum and many have ascribed them to drainage of the bile ducts. But it must be emphasized that food causes just as great a flow of bile, and greater in length of time, than does lavage with magnesium sulphate; yet food does not produce the same effect on the symptoms. Furthermore, drainage of the biliary ducts would not account for the changes demonstrated in the bile, otherwise foods would have produced the same effect. The factors concerned in producing changes in the bile have been accredited to the liver, as has already been discussed. The time coincidence between changes in the bile and improvement in the clinical symptoms suggests that the im-

provement noted was, also, the result of improved liver function.

CONCLUSIONS

1. The findings in the present investigation indicate that duodenal lavage with magnesium sulphate solution can influence the cholesterol concentration and the color of the bile of duodenal contents.

2. The findings suggest that duodenal lavage with magnesium sulphate may affect favorably the clinical progress of patients with biliary tract disease, including chronic cholecystitis.

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MEDICAL PROGRESS

PROGRESS IN OBSTETRICS

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ONE THOUSAND CASES OF ABORTION

HILLIS¹ studied one thousand consecutive cases of abortion which were admitted to the Obstetrical Service of the Cook County Hospital. This series of cases were studied in order to determine points on which there is a difference of opinion in regard to: (1) The relative value of active or operative and conservative or non-operative therapy as applied to (a) febrile, and (b) afebrile cases. (2) The effectiveness of a five-day period of normal temperature between the last day of fever and a curettage in febrile patients. (3) The effectiveness of a five-day period of normal temperature elapsing between the day of admission and a curettage in afebrile patients. (4) The frequency of bleeding severe enough to threaten life in abortions under three months.

All cases were alternatively assigned to two general groups upon admission: an active group, and a conservative group. Patients with threatened abortion were treated with rest, sedatives, and ice bags to the lower abdomen. Inevitable abortions with normal temperature were curedtted on the fifth day after admission, if there was any reason for so doing, provided the temperature remained normal.

Hillis' reason for this five-day period of observation was that all patients were considered potentially septic, and because in a previous series of cases it was found that the conserva-

tively treated cases had fewer days of fever, a shorter stay in the hospital, fewer complications and a lower mortality than those who were immediately curedtted. No cases were curedtted unless the bleeding threatened life, or bloody discharge persisted more than ten days. Neither was any patient with a temperature of 100 degrees or above, curedtted unless the hemorrhage threatened life. But if the hemorrhage which occurred was severe enough to endanger the patient's life, the uterus was emptied, regardless of the temperature. Curettage was done in such a manner as to cause the least possible traumatism to the uterus and surrounding tissues. If fever was present the use of the curette was avoided if possible. Ovum forceps were used to remove the placental fragments which were often protruding through the soft dilated cervix. Cases with dangerous hemorrhage are rare in which the cervix is not sufficiently dilated to admit the ovum forceps. In afebrile cases curettage was done with the fingers, ovum forceps, or curette, depending on the cervical dilation present.

Examination was made by the rectum as a routine in all cases. Twenty-two per cent of the cases studied were criminal or self-induced abortion, while 76% were spontaneous, and in 5% there was a recognized pelvic pathology present.

Hillis presents tables dealing with the parity of the cases studied, the period of gestation, the etiology, the temperature on admission, the total days of temperature, the effect of curettage on temperature, the number of days in the hospital.

the type of treatment, and the mortality. Of the curetted cases (241) three died, and of those that were not curetted (759) seventeen died. He states that there was only one fatal case in which the abortion was known not to have been criminally induced. Most of the deaths were in patients who were admitted in such a condition that it was evident the septic process had extended widely beyond the uterus, and were therefore not curetted.

He concludes:

1. Conservative treatment of abortion in febrile cases gives better results than active therapy.

2. Febrile patients who have a five-day afebrile period have a greater tendency to continue a normal temperature after curettage than those who are operated upon before the end of this period.

3. Afebrile patients with a five-day observation period have a greater tendency to remain with a normal temperature than those who were curetted before the end of this rest period.

4. Approximately 6% of patients must be emptied because of alarming hemorrhage.

5. A plan of procedure which embodies a conservative rest period of five days' normal temperature therefore seems to be a rational method for the treatment of abortion.

PLACENTA ACCRETA

Polak² reports the cause, pathology, and management of this condition. He recognizes that it is a rather rare condition, but that when it occurs it causes a very serious complication to the management of a delivery. He states that this pathological condition is the result of entire, or almost entire, absence of the decidua basalis; that an intimate union of the placenta and the wall of the uterus takes place, and it is impossible to find any line of cleavage for placental separation. He concludes that in this condition manual removal is impossible, and can only result in hemorrhage, sepsis, or perforation. Every delayed placenta with no hemorrhage should be viewed with suspicion; and no attempts at Credé's method should be made if the clinical signs of separation are not present. In the presence of an attached placenta without bleeding, aseptic exploration under anaesthesia should be made to determine the subsequent procedure. If no line of cleavage can be demonstrated, hysterectomy should be done.

His article is illustrated by several photographs, which show clearly the pathological conditions involved.

CHANGES OF PRESSURE INSIDE THE FETAL CRANIOVERTEBRAL CAVITY

Crothers³ in his paper presents evidence that convinced him that the process of successful childbirth depends, to a very great extent at least, upon the preservation of the barriers

which prevent the forces imposed upon the fetus from injuring the central nervous system. He states that the conventional explanation of the cause of death of the majority of babies dying during, or shortly after delivery, is asphyxia.

Crothers reviews the forces that are imposed upon the fetus, and studies the fetal structures which are subjected to stress in the delivery. He reviews the pathological evidence that various authors have made on this condition, and he briefly mentions the clinical evidence which he has studied. Crothers speaks of the pressure within the cranium during normal labor, and abnormal labor. In abnormal labor he speaks especially of cases which are delivered by the breech, and he shows how dangerous accidents may happen. From pathological evidence he states that two accidents, chiefly, may occur: first the tentorium may rupture; or the cervical spinal column may give way. He also states that the vigorous use of measures designed to save the child from death by suffocation increases the already great risk of death from injury.

He concludes that the most important lesions that may occur to the fetus during delivery are: (1) the rupture of the falx or the tentorium, and (2) the rupture of the cervical spinal column.

From his study, he states that rupture of the tentorium occurs in eighty-eight per cent of the still births following so-called breech labor, besides a considerable number of injuries to the vertebral column. He also states, that aside from these gross injuries which account for half of the deaths in viable new born babies, various disabling lesions of the central nervous system are caused; and he raises the question in breech deliveries, if the effort to avoid fetal asphyxia does not add to the almost greater risk of injury to the child.

He ends his article with a bibliography on this subject.

CRANIAL STRESS IN THE FETUS DURING LABOR

In a noteworthy contribution Holland⁴ describes the effect of cranial stress in the fetus during labor, and the effects of excessive stress on the intra-cranial contents.

Holland's investigations were made under a research-grant from The British Ministry of Health in a study on the *Causations of Foetal Death*.

From the 167 fresh foetuses studied the tentorium cerebelli was found torn in 81, associated with tearing of the falx cerebri in four cases, and with subdural hemorrhage in all but six cases.

Holland's paper takes up certain points in cranial mechanics, going into considerable detail in regard to cranial stresses and strains brought about by labor and moulding. The anatomy of

the septa is interestingly put, and his findings illustrated by diagrams and photographs. The pathological anatomy of the tears is shown, and the mode of origin and source of the subdural hemorrhage is clearly explained. The two final sections of his paper deal with the clinical analysis of the cases studied.

Holland says: The effect of stress is alteration in the shape of the head—moulding. This moulding transmits stress to, and is resisted by the attached septa of the dura mater. Over-stretching results in tearing; the most common site for tears being in the tentorium cerebelli, at its juncture with the falx.

Finally the changes in the septa are transmitted to the vein of Galen. This vein becomes stretched so that either it, or some of its tributaries are ruptured, resulting in subdural cerebral hemorrhages of greater or less extent.

Holland believes the septa exerts a protective function in labor; a defensive system against excessive alteration in the shape of the head. Moulding up to a certain point is beneficial, but excessive moulding is dangerous, because of the intra-cranial disturbances produced, the most evident of which is cerebral hemorrhage.

Holland goes into careful description of the pathological anatomy of the lesions found and these lesions are strikingly illustrated. Holland's analysis of the cases from a clinical standpoint is most interesting.

Of the 167 fresh foetuses examined, the tentorium was torn in 81, or 48%, showing how very common the injury is. It is the study of these 81 cases that will prove interesting to the obstetrician, and the general practitioner.

Forty-six were vertex deliveries, and 25 of these were forceps cases, while 19 were natural deliveries. There were 47 cases of breech deliveries among the 167 fetuses examined, and the tentorium was torn in 35, or approximately 75%.

Holland further analyses these breech cases and finds in the uncomplicated cases, that is, the position alone is considered, there were 17 cases, and in 15 the tentorium was torn. In the cases where a version was performed and an extraction done, the tentorium was torn in 20 out of 28 cases examined. Because of these figures, Holland makes the following statements: 1. Tearing of the tentorium is found in 88% of the dead foetuses delivered by the breech, and in 71% delivered by podalic version.

ETHYLENE-OXYGEN ANAESTHESIA

Heaney⁸ reports the use of ethylene as an anaesthetic in obstetrics and gynecology. He states that Luckhardt in 1918 and 1922 first demonstrated at the University of Chicago the physiological effects of ethylene, and in March, 1923, its use as an anaesthetic for surgical work

was begun in the Presbyterian Hospital in Chicago; and that shortly after it was used in obstetrical and gynecological work.

Heaney uses the same machine as nitrous oxide is administered by. While it was still new and in the experimental stage, ethylene was given only by the anaesthetists of the hospital, but now it is being given by the internes.

Heaney reports on 242 anaesthesias with ethylene in the Gynecological, and 193 in the Obstetrical Department, and many times for pelvic examinations. He says that it can not be too warmly recommended for diagnostic examinations. With ethylene, relaxation is complete and rapid, and the recovery, while not so quick as after nitrous oxide, is, however, satisfactory. Complete recovery is to be anticipated in thirty minutes in all cases, while most patients leave the examining room within ten minutes. He states that it is ideal for making vaginal examinations before and during labor.

Heaney states that ethylene is now used as a routine instead of nitrous oxide in obstetrics. Analgesia is obtained more quickly, and the result is more satisfactory. For the final pains, ethylene gives complete relaxation and anaesthesia. He does not feel that it is necessary to add any ether. The percentage of ethylene required varies from eighty to ninety per cent; while in some cases, ethylene and oxygen have been used in equal parts. Analgesia with ethylene is frequently obtained on the second respiration.

Confusion is not so common as with nitrous oxide, and he states that it has been given as long as eight hours to a woman in labor; but that it is his impression when long administered the strength of the pains become somewhat decreased. He also states that he has given small doses of pituitrin more often when ethylene is used than with nitrous oxide. He calls attention to the fact that while ethylene is being given the patient has an unusual pink color. The true explanation of this apparently has not yet been made.

Sixteen simple forceps operations have been done with satisfactory results. Placentae have been removed, and extensive repair, if necessary, can be done. Heaney feels that ethylene has every advantage that nitrous oxide has for Cae-sarean Section. He notes that during complete anaesthesia with ethylene the breathing is not as exaggerated as under ether, but is natural or somewhat shallower, and that the patient does not sweat, so that even after a prolonged operation the skin is dry.

He speaks of the well known explosiveness of ethylene, and tells of one case where an explosion took place in the delivery room. He apparently, however, was not disturbed by this accident, and says that he will continue to give ethylene as before.

BREECH PRESENTATIONS TREATED BY EXTERNAL VERSION

Ryder⁶ reports a series of fifty-nine breech cases occurring in his own private practice, which were treated by prophylactic version. Twenty-four of them were in primiparae, and thirty-five multiparae. He divides these cases into three groups: first the non-viable, of which there were seven; second the viable which were under observation before labor began, of which there were forty-nine; and third the viable which were not under observation before labor began, of which there were three. It is the second group of cases which are especially interesting, and of the forty-nine cases in this group, external version was performed on twenty-nine. Following the twenty-nine external versions, twenty were delivered normally; seven were delivered by forceps; one delivered by the breech after spontaneous reversion; and one was delivered by Caesarean Section. These twenty-nine babies were all born alive. Of the sixteen other babies in this group no attempt was made at external version, and delivery in all of them was made by the breech. In five, labor started prematurely, before external version was decided upon, and eight were one of twins, where external version was contra-indicated. Three were multiparae at term, two of which spontaneous version from a vertex to a breech took place in the first stage of labor. The final case was a lateral placenta praevia which was left as a breech as a precautionary measure. None of these babies were lost. In one case an external version was performed four times. Twenty-three of the external versions were performed without an anaesthetic. Seven were performed under ether, three in primiparae, and four in multiparae. The majority of versions Ryder did in the seventh or eighth calendar months. There was no more maternal mortality, and in no case, with one possible exception, did the external version seem to do the slightest possible injury to the mother. In this one case a slight amount of bleeding from the vagina followed the version, but no harm came of it. Ryder advises that whenever this external version is attempted that the patient's bladder be emptied. If the breech can first be pushed up from the pelvic brim, the remainder of the version is comparatively easy. For this purpose it is useful to have the patient assume the knee-chest position, just before the attempt at external version is made.

Ryder concludes that the safest method of treating breech presentation is by prophylactic external version; that external version not only reduces the fetal mortality, but renders the labor shorter and more natural for the mother. External version is safe if done without force. The best time for performing the version is usually the seventh or eighth calendar month, and can usually be done without ether, but when at all

difficult, a general anaesthetic should be used. He warns physicians that force never should be used, and if version cannot be done without force the operation should be given up.

PAINLESS CHILDBIRTH BY SYNERGISTIC METHODS

Gwathmey⁷ and a group of his house surgeons make a detailed report of their study of producing painless deliveries by synergistic methods. Gwathmey's idea in developing this method was to find some simple method that could be used either in the home, or in the hospital by any physician in an entirely empirical manner. The ideal sought was a state of relaxation, and an analgesia with consciousness, but little if at all, impaired, so that full co-operation might be had at all times. He reviews the previous methods of painless childbirth, and then describes the method that he has come to.

The method is as follows: a cleansing enema is first given. When the pains are four to five minutes apart, lasting for thirty or more seconds, the rectal instillation is given. He chose cases for trying out this method where the dilatation was not too far advanced, and the conditions seemed absolutely normal. The method and formulae used are as follows: 2 e.e. of 25% solution of magnesium sulphate (chemically pure) is given subcutaneously. Morphine is added to the first hypodermic when indicated. Magnesium sulphate is repeated once or twice, but without morphine. The rectal instillation used is made up of

Quinine Hydrobrom	Grains 10
Alcohol	Drams 2
Ether	Ounces 2½
Olive Oil, up to	Ounces 4

The instillation is forced into the rectum through a catheter by a syringe very slowly, taking in all about five minutes; but he advises that pressure be continued over the perineum for some fifteen minutes during the pains.

The results obtained are as follows: in 3% of the cases excitement occurred; 3% showed no marked change; in 94% there was a definite sedative action. Four per cent of the deliveries were with forceps, and 96% were normal. Labor was prolonged in 4%, but progressed uneventful in 96% of the cases. Nausea appeared in 1%; thirst in 4%; vomiting in 8%; and normal and uneventful in 86% of the cases. Pain apparently was increased in 1%, and unchanged in 3%; definitely modified or painless in 96% of all cases. In 1% asphyxia was present in the baby; 2% of the babies were apnoeic; 97% of the babies cried at once.

He reports several typical cases, and shows a chart which he uses in the studying of these cases. His report is based on the study of two hundred cases, and he feels that he has established principles upon which painless labor may be safely worked out; that is: by using the minimum dose of a number of drugs, compatible and

synergizing, using each drug for a definite and specific purpose.

MATERNAL MORTALITY

That "an excessive maternal mortality" is a cause of worry in England and Wales is clear on reading the report on Maternal Mortality published by The British Ministry of Health, written by Dr. Janet Campbell¹.

Dr. Campbell's monograph is a most interesting and valuable contribution to the study of maternal mortality. Much that she says is applicable to the United States, and shows that the problems in obstetrics that England faces are much the same as here.

The first two sections are devoted mainly to statistics on the subject. She gives comprehensive tables on Maternal Mortality in England and Wales, in rural areas, and in industrial cities; and then goes into the general causes of maternal mortality. Mortality due to puerperal infections is studied exhaustively, for it causes the greatest number of deaths yearly. Dr. Campbell comments on the fact that puerperal fever was made a notifiable disease in 1899, but that notification has proved unsatisfactory and disappointing. Dr. Campbell feels that the indefinite character of the term puerperal fever is one of the reasons for this failure, and suggests that as exact a definition of puerperal infection as is practicable be made and to indicate what signs and symptoms should lead a doctor to notify the illness. She comments also on the fact that there is not close coöperation between the local authorities and the general practitioner, and states if doctors understand that notification will bring the prompt offer of a nurse, a hospital bed, or a consultation, and not merely an inquiry into the reason for infection, that they then will come to look upon The Public Health Department as an agency directly beneficial to themselves and their patients, and not merely as the originator of rather vexatious inquiries.

Next to sepsis the toxemias of pregnancy cause the most deaths, and the hemorrhage cases follow. Dr. Campbell touches upon the education of the physicians, and the training of the midwives, and makes interesting comments on the social and educational measures necessary to prevent this high maternal mortality.

Her recommendation submitted for consideration in order to secure a reduction in puerperal mortality and morbidity are:

1. An improvement in the quality of the professional attendants to be obtained by adequate education of the medical student in obstetrics, and the better training of midwives.

2. Preventive midwifery through The Public Health Department of the local authority which should comprise ante-natal and post-natal care of all pregnant women. The establishment of maternity centres, the provision of maternity

beds, including observation and isolation beds, and the investigation of all maternal deaths due to childbirth.

3. Widespread educational propaganda through official and voluntary agencies, with the purpose of instructing the women themselves, and of forming an enlightened public opinion as to the proper attention to health at the time of pregnancy, childbirth, and lactation.

NEW YORK STATE DEPARTMENT OF HEALTH DIVISION OF MATERNITY

The New York report for the year 1923 of The Division of Maternity, Infancy and Child Hygiene² is most interesting. It is very full and illuminating. It goes over the work of maternal and child hygiene that is now being done as the result of the Davenport Law, and because of the Sheppard-Towner Act.

An interesting organization has been established. Regional consultants have been appointed. Demonstrations, nursing services, and pre-natal services have been started where there has been a high infant and maternal mortality. Extension courses for nurses have been given. A breast feeding demonstration has been carried out. Health clubs have been formed in order to educate the mother in mother's and infant's hygiene work. The midwives have come under closer supervision, and regulation. Various pamphlets in regard to prospective mothers and infants have been sent out, and various articles have been written, and lectures have been given on obstetrical subjects. The regional consultants prepared a pamphlet on standards for maternity care which was sent out to every physician in the state. The records of the activities of the department are being carefully kept on carefully thought out record cards, so that in a short time a most valuable series of statistics will be available. Loan closets have been formed where prospective mothers can see the proper outfit for the coming baby, and where certain of the articles can be borrowed for nothing, or a nominal sum. Confinement outfits for the mother have been made up so that she may make them up at a very reasonable cost.

It is the most stimulating report, and shows clearly what good can come from the added stimulus of the Sheppard-Towner Act when carefully administered.

OBSTETRICAL ACTIVITIES UNDER THE SHEPPARD-TOWNER ACT

The Sheppard-Towner Act became a law November 23, 1921. It is, of course, too soon to see any marked effect of this law, but it is interesting to see the activities of the Federal Bureau³ under this law which has been accepted, up to the present time, by forty states. Only one, New Hampshire, of the New England states has accepted it.

Some of the activities of the Federal Bureau

under this act are as follows: a statistical study of maternal mortality, and a study of the reporting of maternal deaths by checking the death certificates, of women dying between fifteen and fifty years of age, with the birth certificate to determine if the deaths occurred within a month following delivery, has been done in Maryland, Massachusetts, Wisconsin, and North Carolina. Research is being conducted into the cause, pathology, and prevention of still births and neo-natal deaths. The various states that have accepted the act have devised interesting and various methods of carrying out the law. One state has a health car, manned by a physician and nurses, going around in the various counties holding conferences. Other states have various kinds of motor cars for the purpose of reaching the rural communities. Mother's classes and group instructions are held by many of the states. The classes take up pre-natal care, delivery, post-partum care, and the care of the baby. Pre-natal conferences and obstetrical clinics are held in various states. All the states not within the birth registration area are making special efforts to bring their records up to the standards required by the United States Census Bureau. In many of the states where a large percentage of the births are looked after by midwives, special classes are being held for the midwives and also for the public, in order to educate them what to expect as to cleanliness and care. In the teaching of the midwives all the states are aiming towards the certain fundamental principles of pre-natal care, the technique of delivery, and post-natal care.

Several of the states have dental units that travel over the states, instructing the mothers on the care of the teeth during pregnancy. Some of the states are directing the distribution of supplies for the mothers who are unable to go to

the hospital, while others have models and patterns which the mothers are taught to copy for their own use. The obstetrical packages containing the materials which may be needed at the time of confinement, and the layettes, are all carefully gone into. The mothers obtain them at the loan closets, or they are sold at a nominal price, or given for free distribution by women's local organizations. Many of the states are conducting correspondence courses covering the pre-natal care of the mother, and many are issuing a series of pre-natal letters. Various exhibitions, films, and radio talks are used by the states. Literature of various kinds is being distributed, and in those states where there is a large foreign population, the pamphlets and leaflets for the prospective mothers are in their native tongue.

It is evident in the short time that the law has been in effect that a widespread interest has been aroused, and it should only be a short time before definite good results are seen.

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A CONCEPTION OF OUR RESPONSIBILITY TO THE CHILD

BY DR. M. VICTOR SAFFORD

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IF professional solicitude for the welfare of, the child continues to increase at its present rate, child welfare work will soon become a prominent occupation of men and women in this country. The activities of those interested in the welfare of children already includes efforts to prevent their birth and we are facing the prospect of a constitutional amendment which may start the operation of a corps of Federal officials to prevent boys and girls from developing industrious habits at a time of life when such habits must be developed if they are going to be acquired at all. Most of those engaged in child welfare work, however, pick out some period of a child's existence between these extremes as the proper time to exercise their

solicitude for the health and physical well being of children.

It was estimated some years ago that in New York City over two hundred different organizations were engaged in such work.

Child welfare work finds its chief reason for existence in the failure of a noteworthy proportion of babies to live and in the failure of a conspicuous number of children to develop into normal adults. It receives encouragement from variations in infant and child mortality in different places and among different classes of people in the same general locality and from fluctuations in mortality at the same place at different times. For example, in 1923, the infant mortality rate in Boston was 82.49; in New

York City, 66; in St. Louis, 69.5; Richmond, Va., 107; Fall River, Mass., 90; Quebec, Can., 221.9; and in Budapest, Hungary, nearly 500. Variations in the infant mortality in the different wards of Boston were wider than among the different United States cities above mentioned and in Brookline, which is almost surrounded by Boston, the infant mortality rate was 54.2. In Boston, the infant mortality, without apparent cause, suddenly dropped in 1921, to 77.2, from 100.8, which had been about the average mortality for several years. In 1922, it was up to 92.7. In 1923, it was down again to 82.5. While the infant mortality rate in Boston has been subject to such fluctuations, it has here, as in all the other United States cities mentioned above, been steadily tending to decrease for several decades.

From such data as the foregoing it is usually assumed that all that is necessary to reduce the infant mortality of Quebec to the New York City rate, for example, is a nursing and medical supervision of babies and pregnant women which it is regarded as quite possible to furnish; that it is all a matter of securing enough money, by taxation or otherwise, to pay for the cost of recruiting and training a sufficient nursing and medical personnel. It is to be inferred, also, that the same organization by which infant mortality is to be prevented may be expended to assure children generally a proper physical development.

The satisfactory propagation of human populations is subject to the same biological laws as the breeding of any animals. These laws are as yet far from being well understood. We have come to recognize fairly well certain factors which will determine success or failure in the breeding of animals, human or otherwise, but there are other factors including the influences of heredity, of diet, and of environment which we as yet only partly appreciate and we are often made aware of the influence of still other factors which we do not understand at all. Every successful breeder of animals knows that cleanliness with respect to food and quarters, the prevention of contamination of food and drink and of the air of living quarters by animal excretions, the maintenance of a variety in the diet and a certain amount of physical activity are absolutely essential to success in breeding animals. A breeder of animals may find, however, that in spite of all his efforts to maintain these conditions, his animals will become unproductive, their offspring will tend to die or fail to develop properly, and the females will exhibit a tendency to die when giving birth to young. After some unprofitable experimenting, the breeder will accept the statement of other breeders that his stock is "played out" and take their advice to kill his animals and start anew with a fresh stock.

This last described result of the operation of biological laws we encounter in our efforts to lessen mortality and improve health in the human population of Boston and we must expect to meet it in a greater or less extent in any city or town. Wherever we can bring about in any human population any improvements in the conditions of cleanliness of the character described in the foregoing, we can definitely rely on seeing a reduction in mortality from all causes and an improvement in physical development and welfare generally. Practical experience has also repeatedly demonstrated that in order to obtain noteworthy success from the application of such methods in crowded populations, it is essential that the economic condition of the people be such as to enable them to carry out these health promotion measures themselves. Improve the economic conditions of any people and enable them to have better living conditions and a better dietary, and a lower mortality rate and stronger men and women will follow as a matter of course in any large group of human beings. A pure water supply, the pasteurization of milk, supervision over food supplies, running water and sewerage connections in human habitations, the protection of the purity of food supplies, measures which operate to lessen opportunities for the contamination of food and drink by flies or other means, and the constant improvement in the economic condition of the people which has both made possible costly community cleanliness and better family diets, are so largely accountable for the decrease in mortality and improvement in health which has been going on in Boston for the last fifty years as to make it practically impossible to determine accurately the value of other health promotion measures.

In Boston, measures for the promotion of community cleanliness of the kind above enumerated are nearing the limit of their possibilities. Our infant and child welfare problems have now become largely those due to the operation of biological laws which lead the animal breeder to kill off his animals and start anew with a different stock. A close scrutiny of the death certificates of infants as they come into the Health Department indicates that a good majority are properly to be ascribed to congenital inability to live. Young people whose physical makeup indicates that they could not be expected to produce normal offspring form a conspicuous element of the population to be seen on the streets. The striking variations in the infant mortality in different wards shows a definite relation to racial stock as well as to economic conditions. Congenital defectiveness and poor heredity are important factors in much of the so-called "malnutrition" which comes to the attention of child welfare workers and children's clinics.

The statement is heard that the attention

which we are devoting to the abnormal is tending to perpetuate the unfit. As a general proposition, this is not so. The operation of biological laws in human animals is not so easily defeated. But even if it were so, in our human relations as they actually exist, we are confronted with the plain duty of trying to make defectives useful. This alone is a sufficient justification for undertaking a certain amount of intensive child welfare work. In addition, experience has shown justification for some effort to prevent normal, potentially useful infants and children from being spoiled from preventable causes.

But while child conservation is based on a sound principle, the present conventional methods of approaching its problems must be regarded as largely experimental. A certain procedure is not to be approved merely because it appears to be benefitting certain individuals. Every procedure should be regarded critically with view to discovering if the same expenditure of money might not accomplish more good in some other way.

The real value of local child welfare work in any place is difficult to determine because statistical data on which one must largely rely is always influenced by other factors. Claims made as to the results of such work are sometimes as unreasonable as it would be to contend that infant welfare and prenatal work in Boston does more harm than good because the two years of the lowest infant mortality rate which Boston has ever had happened to be years when the chief infant welfare organization in the city was complaining that its work was being crippled from lack of funds.

The beneficial effects on the public health of the installation of a pure water supply or a sewerage system are immediate and unmistakable and the personnel required for maintenance is small and comparatively inexpensive. An attempt to improve public health by supervising the lives of individuals is necessarily expensive and the expense tends to mount rapidly. It appears logical to contend that the larger the number of individual lives supervised the greater the public benefit. This means constant efforts to increase the personnel of the supervising organization, be in public or private. An increasing personnel means an increasing cost, perhaps even proportionately greater, but what is more important, it is not long before the supposed interests of the personnel of any organization push themselves forward for consideration as well as the objects for which the personnel is employed and it becomes increasingly difficult to change in the interests of efficiency, methods and practices which were regarded originally as experimental, because changes jeopardize somebody's job or interfere with somebody's prerogatives.

Various factors also operate to lead persons to assume direction of child health work who

do not appreciate the limitations of their own knowledge or of our knowledge in general regarding matters with which they undertake to deal. The extent to which maternal mortality may be prevented by prenatal care and medical skill is very uncertain. The toxemias of pregnancy are still wrapped in a great deal of obscurity. Deaths from septicaemia at the puerperium are not necessarily due to carelessness or neglect. They do occur in apparently normal women under most favorable surroundings with the benefit of the highest professional skill. A congenital defectiveness which amounts to congenital inability to live usually manifests itself most prominently in inability to assimilate food and is consequently credited in the death certificate to some apparently preventable disease of the digestive tract. There are many adults to be seen today who are physically handicapped by too close an adherence on the part of their parents to the approved hygienic teachings of twenty five years ago. In our anxiety then to keep disease germs out of children we accidentally deprived them of things which were necessary to their health and physical development. We know this now but even yet we do not know enough about so called vitamines, endocrines and metabolism to be sure that we are not still doing harm with our present dietary hypotheses and theories. In other respects, also, and even in the light of available knowledge, a great deal of the present health instruction which is being glibly reeled off to the public cannot be regarded as entirely safe. To some extent, certainly, the supposed needs of infancy and childhood are being capitalized to provide an agreeable and lucrative vocation.

All this has a direct practical application to our real problems of child life. We should realize that it is of primary importance to try to prevent such problems by endeavoring to bring about in a community those fundamental conditions which are known to be favorable to animal life. Moreover, we should not forget that biological laws may operate to overcome more or less unfavorable conditions and to preserve as well as to destroy life. The development in our population of an increased resistance to active tuberculous infections is reflected in the death rate from this disease which has been constantly decreasing for more than fifty years.

In so far as the promotion or correction of abnormality may seem to call for personal attention to individuals, each case is to be regarded as a problem in itself, a matter calling for medical skill and clinical experience and not for the application of the routine methods of the faddist. Failure of an infant or child to increase in height and weight on a diet known to be capable of increasing height and weight indicates that something is wrong. Ability to increase in size on such a diet is not however a

proof of health, nor, in a human being, an indication of future value. Health is indicated by complexion and demeanor, by the symmetrical development of muscles and skeleton, by the right kind of a nervous system which expresses itself in good muscular coördination, and in physical and mental activity combined with ability to rest, and above all, a normal physical condition is indicated by capacity to overcome acute infections. Overgrowth or too rapid development is often accompanied by serious vital weakness which sooner or later manifests itself under stress. We are hearing now a good deal about the "pre-tubercular child." Under living conditions in this vicinity, a child has a better chance of escaping the colon bacillus than the tubercle bacillus and the time may come when a positive tuberculin reaction in a child will be regarded with satisfaction rather than apprehension.

We should not allow more or less dubious statistics regarding maternal and infant mortality and a good deal of conspicuous evidence that children may go wrong physically or mentally to give us a distorted perspective on our child welfare problems. Even before the days of the popularity of intensive child welfare work, most mothers lived to a reasonably old age and many puny babies and "undernourished children" grew up to be strong, healthy men and women. The real interests of the child in any community demand that the value of expensive child welfare experiments be carefully checked up. Fear of being branded as unsympathetic to progress in the promotion of public health should not deter us from insisting that the claims for public support of any health promotion project should rest on something more substantial than a sort of patent medicine testimonial to the effect that the supposed beneficiaries took it and lived.

BOOK REVIEWS

Differential Diagnosis. Volume II. Presented through an analysis of 317 cases. By RICHARD C. CABOT, M.D., Professor of Medicine and Professor of Social Ethics at Harvard University. Formerly Chief of the West Medical Service at the Massachusetts General Hospital, Boston. Third edition, revised, profusely illustrated. Philadelphia and London: W. B. Saunders Company. 1924.

This new edition of a well-known book is not radically altered from its earlier form, but still bears evidence of thoughtful revision. The cases remain unchanged, but some of the introductory discussions have been considerably modified and enlarged. The general tone is slightly tinged by special reference to certain matters that had the glamor of novelty when the first edition was written, now lost, and by absence of emphasis upon certain other matters which have that glamor today. This, however, does not detract seriously, since the result is a sound exposition of the more permanent aspects of medicine, excluding aspects which may still be ephemeral.

The obvious purpose of this work (as well as of Volume I, on Pain, Headache, etc.) is to provide a substitute for clinical experience. The method fol-

lowed is to take up, in order, common symptoms or causes of complaint, and, after a general discussion, to describe in detail a number of cases in which the symptom or complaint has been traced to different diseases or circumstances. Thus the reader who is able to understand and to remember these cases and their discussions will acquire what may be called a "second-hand" clinical experience to this extent. From such study, no one, either student or physician of long practice, can fail to benefit.

The nineteen chapters in this volume deal, each one, with a certain abnormal feature. The list extends from "Abdominal and Other Tumors" through "Vertigo," "Dyspepsia," "Hemoptysis" and "Pallor" to "Ascites and Abdominal Distention." The 317 cases are illustrative of these nineteen conditions as resulting from different causes. All are eminently instructive.

It is necessary, however, to notice certain limitations both of the method and of its application. As to the method, it requires close concentration and strong powers of imagination in any reader to visualize cases in a satisfactory manner from any written description; not all students have these necessary qualifications. Moreover, even the experienced clinician will fail to gather from these case reports the same suggestions and impressions that he would obtain from his own examination. It has been said: "No one believes another's physical signs." This is, of course, a hyperbole statement. Still it is true that descriptions in words by another person cannot take the place of the perceptions of one's own senses. Thus, valuable as the study of this book is as an exercise, it would not be well for any student to devote himself to it to the neglect of opportunities to deal actually with patients.

The cases presented are evidently chosen from a very large source of clinical material. Still, it is to be remembered that 317 cases, even selected ones, can serve only as a beginning for one who hopes to gain a wide knowledge of medicine. The reader must realize that after he has mastered this volume, or both volumes, the whole field of medicine has by no means been covered. Moreover, the fact that many of the cases are most unusual ones, or present most unusual features (for instance, the case of glaucoma with recovery), is not an unmixed advantage. While these cases illustrate the necessity of considering uncommon conditions, the beginner may be led to suppose that rarities are more prevalent than is the fact. Tables, however, are included, showing the relative frequency of different causes of each symptom (some of the figures being a surprise to the reviewer), which should correct this tendency for careless readers.

Thus the use of this book is to be recommended to supplement, but not to replace, other studies in diagnosis. With this provision, however, its value can hardly be overstated.

Wheeler's Handbook of Medicine. By WILLIAM R. JACK. New York: William Wood & Co. 1924.

In the opinion of the reviewer, there is in medical literature no longer place for the frequent small handbook, attempting, in a hurried, incomplete manner, to compress all of medicine between two covers.

The medical student, panicky before his final examinations, may search for some short, all-inclusive draught of knowledge, but for even him the compendium is of doubtful value.

Wheeler's Handbook is rather below than above the average. Misstatements occur—that simple goiter in the United States is rare, for instance; important subjects, such as the use of insulin and treatment of exophthalmic goiter, are badly handled, and meningitis and diseases of the central nervous system are passed with the usual inherited paragraphs.

**Case Records
of the
Massachusetts General Hospital**

ANTE-MORTEM AND POST-MORTEM RECORDS AS USED IN
WEEKLY CLINICO-PATHOLOGICAL EXERCISES

EDITED BY
RICHARD C. CABOT, M.D., AND HUGH CABOT, M.D.
F. M. PAINTER, A.B., ASSISTANT EDITOR

CASE 10431

An Italian shoemaker of fifty-one was sent from the Emergency Ward April 12. The chief complaint was pain in the legs. The history was obtained chiefly from his wife.

F. H. One sister died probably of nephritis.

P. H. He knew no diseases of childhood. At seventeen he was severely ill in bed for six months with a disease which he said did not affect any of his organs. He was then well until he had influenza four years ago. He had had boils on his back frequently, and rheumatism in his left shoulder. His teeth had been giving him trouble.

Habits. Good. He formerly drank wine.

P. I. Three years ago he began to have polyphagia, polyuria and polydipsia. A physician treated him for inflammation of the bladder. The treatment of this physician and another who made a different diagnosis did him no good. He had edema of the feet. Two years ago he went to a hospital where he made great improvement and was sent home with directions for diet. After this he was fairly well until the September before admission, when he fell, striking his right leg. Since that time he had been growing weaker and had had a return of the old symptoms. He now urinated three times at night and drank an abnormal amount of water, but had poor appetite. He became dyspneic on exertion. Three months ago he began to have cutting pains in his legs, especially in the right, usually in the thighs, but sometimes extending to the lower legs. This had grown more severe and was now almost constantly present, keeping him awake at night. March 11 a physician started treatment with insulin, leaving directions for daily injections given by a district nurse. After five days he developed delirium, with great restlessness and delusions. In the absence of the physician insulin was given for six more days, after which he was given sugar. The delirium continued a week longer. A month before admission he developed three "abscesses" on the lower back which became confluent and discharged pus for several days. For two days he had been somewhat confused and irrational. His usual weight before his present illness was 170. After treatment last year it fell to 150. Recent-

ly it had fallen considerably. For two years his bowels had been constipated, requiring enemas.

P. E. An emaciated man (weight 103 pounds April 17), restless and not entirely oriented. Skin dry and inelastic. Tongue dry and beefy red. Acetone odor to breath. Teeth poor; many broken roots. Pyorrhea. Inguinal glands moderately enlarged, firm. **Heart.** Apex impulse not found. No enlargement to percussion. Rate rapid. Second sound at the base sharp, with a musical quality. Murmurs questionable. No marked peripheral arteriosclerosis. Brachials thickened but soft. Temporals somewhat tortuous. Dorsalis pedis arteries not felt to pulsate. **Lungs.** Left upper chest posteriorly slightly dull. Breath sounds diminished. Squeak at end of inspiration heard at apex and at left base. **Extremities.** No sensory changes to rough tests. Bedsores over sacrum. **Pupils** small, equal, slightly irregular, no reactions to light. **Reflexes.** Knee-jerks not elicited.

T. 98.4°-104.1°; septic swinging. **P.** 80-140. **R.** 14-34. **Urine.** 6100-400 c.c., sp. gr. 1.002-1.010, acetone at four of eleven tests, ferrie chlorid positive at two, sugar at three of fourteen. **Blood sugar** April 13 190, April 17 167, April 21 168, April 24 126. **Blood.** Hgb. 75%, leucocytes 8,500-11,500, polymorphonuclears 74%, reds 4,000,000, slight achromia and anisocytosis. **Three Wassermanns** strongly positive. **X-rays** April 16. Chest plate unsatisfactory. Left antrum somewhat less radiant than right. . . . Root fragments in molar and probably also in bicuspid region. No evidence of apical pathology. No evidence of pathology in the tibia. **April 18.** See illustration. Left apex appeared to light up poorly, and mottled clouding extended into this region. In the midchest, extending from the lung root, which was increased in density, was an area of increased density reaching about half way across the field and gradually fading out into the lung field. In the center of this area was a circular bright area suggesting cavity formation. **Lumbar puncture.** 10 c.c. of clear colorless fluid. Initial pressure 62. After withdrawal of 5 c.c. 42, after withdrawal of 5 more c.c. 26. Hydrodynamics normal. 7 cells. Ammonium sulphate positive. Alcohol slightly positive. Wassermann negative. Total protein 108 Goldsol 1112330000.

Orders. April 12. Pulse and respiration every hour. Force fluids. Soapsuds enemata. Rectal glucose 5%. Sodium bicarbonate 5 vols every four hours. Orange juice 5 vols every hour. Keep warm. Sodium bicarbonate gr. xx by mouth. Insulin units 5 t.i.d. Regular breakfast in morning. If respiration less than 20 or pulse less than 120 call house officer. If sugar at 2 a. m. 5 units of insulin. Codeine gr. 1/8 for pain, repeat once if necessary. (Try not to use this.) Caffein sodium salicylate gr. xx intramuscularly. April 13. Special diet:

DIET

(The figures throughout indicate grams, except in the case of bran cakes.)

April 13. 40% cream 180, orange 140, spinach 150, tomatoes 150, string beans 150, cauliflower 150, steak 45, cold meat 30, butter 20; total 1015. Broth 400. Bran cakes 4.

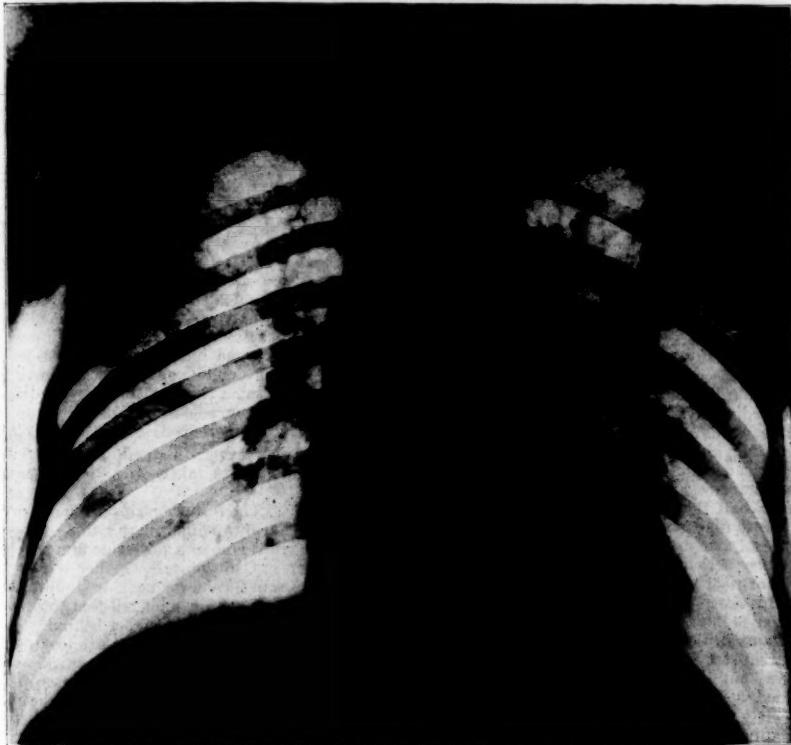
April 14. Oatmeal 15, 40% cream 270, or-

meat 45, butter 18; total 1558. Broth 600. Bran cakes 6.

April 18. (Soft solid diet.) Oatmeal 15, 40% cream 270, milk 360, egg 300, orange juice 430, butter 27; total 1402.

April 19. Oatmeal 30, 40% cream 420, orange juice 130, milk 360, potatoes 60, rice 30, egg 150, minced chicken 30; total 1210.

April 20. Like April 19.



The left apex appears to light up poorly, and mottled clouding extends into this region. In the midchest, extending from the lung root, which is increased in density, is an area of increased density reaching about half way across the field and gradually fading out into the lung field. In the center of this area is a circular bright area suggesting cavity formation.

ange 210, string beans 150, asparagus 150, tomatoes 150, cabbage 150, egg 100, steak 45, cold meat 30, butter 23; total 1193. Broth 600. Bran cakes 6.

April 15. Like April 14, with fish instead of steak.

April 16. Like April 14.

April 17. Oatmeal 15, 40% cream 330, orange 350, tomatoes 150, cabbage 150, string beans 150, cauliflower 150, egg 100, bacon 15, steak 45, cold

April 21 and later. Like April 19 with the addition of broth 600 and bran cakes 6.

Orders. April 13, continued. Insulin units 8 t.i.d. before meals. Force fluids, 3 130 daily. Codeia gr. 1/4 by mouth. Morphia gr. 1/6 by mouth. April 15. Insulin units t.i.d. April 17. Codeia gr. 1/4. Veronal gr. x by mouth. April 18. Tb. precautions. April 19. Insulin units 5 t.i.d. Paregoric 5 ii. April 20.

Paregoric 3 ii, and 3 i every hour until diarrhea stops. April 22. Paregoric 3 i. April 23 and 24. Paregoric 3 i. Veronal gr. x with aspirin gr. x. April 25. Aspirin and veronal gr. x. April 26. Compound tincture of opium 3 i. Paregoric 3 ii, and 3 i in an hour if awake. April 29. Morphia gr. 1/8 every four hours s.c. p.r.n.

The cause for the temperature was not obvious. The patient had pains in his legs. April 18 there was dullness and bronchial breathing in the left midscapular region. There was no cough, but it was found that the patient was swallowing sputum. By standing over him a small specimen was obtained, and was found to be loaded with tubercle bacilli. April 20 he had severe diarrhea. Rectal examination was negative. There was intense amphoric breathing in the left midback. April 24 the insulin was discontinued. April 28 the patient died.

DISCUSSION

BY DR. RICHARD C. CABOT

NOTES ON THE HISTORY

One would suppose there could be only one thing to say about this case,—diabetes,—although of course it is perfectly possible to have a similar history with chronic nephritis. But we ordinarily say diabetes when we hear the three words polyphagia, polyuria and polydipsia. My guess is that they made the diagnosis of diabetes and treated him for diabetes and he soon improved with a diabetic diet. For a year and half then he was pretty well.

Many diabetics do have poor appetites; but it is a bad symptom when they do.

Such delirium is perfectly possible as a result of poorly given treatment for diabetes; but in this case it is probably due to a complication. Sugar is the treatment for too much insulin.

Pains in the legs are quite natural in diabetes untreated. We do not see much of them nowadays; but in cases of high blood sugar the so-called sciatica or rheumatism used to be extremely common. It is one of the things that has disappeared with better treatment.

This is the story of diabetes with a septic complication.

NOTES ON THE PHYSICAL EXAMINATION

The musical quality of the second heart sound would make us suspect that we should have a high systolic blood pressure.

In diabetes we know the commonness of tuberculosis as a complication, and always examine the lungs more carefully than we otherwise should. Squeaks and some dullness is all that they have here, so that there is pretty little evidence so far of tuberculosis.

The failure of the pupils to react, with the pains in the legs, makes us think of tabes, es-

specially as the knee-jerks were not elicited. But as I have said, sciatica and the absence of knee-jerks are common in diabetes, and we have nothing except the condition of the pupils on which to base a diagnosis of tabes. We should have to have something more than that before we make it.

He had a septic bedsores.

The gravity of the urine is pretty low.

The blood sugar is rather high, but not extremely so at any time.

In the presence of fever such as this man had I do not take much stock in Wassermann reactions.

In the X-ray examination they are thinking undoubtedly about the question of tuberculosis in the lungs. This probably is not a seven-foot plate, so that although the heart looks large we do not need to pay any attention to it. I should not suppose that plate showed anything more than he has a perfect right to have in health.

DR. RICHARDSON: I should like to ask about the condition at the left lung root.

DR. JOHN D. CAMP: This film is made with the patient on his back, and for some reason with a patient on his back we get more prominence of the lung roots than in a film made with the anterior chest against the film. However, I think there is some increase of shadows at the left root, but I should not say tuberculosis. We might get the same thing with other conditions, with various low-grade infections. I could not say that it was tuberculosis from this film.

DR. LINCOLN DAVIS: I should like to ask how you tell that it was taken with the patient on his back?

DR. CAMP: The posterior ribs are more prominent and sharply defined in this film. The detail of the front ribs in a posterior film is less.

DR. DAVIS: Can you tell whether it was taken with the man flat on his back or standing up?

DR. CAMP: No, we cannot tell that, but merely that the plate was taken from behind.

DR. CABOT: In the tibia they are looking for one of the evidences of syphilis, cortical thickening along the tibia. They did not find it.

DR. CAMP: I should not think that the plate shows any cavity. We often see little defects in the scapula, or see a bronchus from the end, giving much the same appearance as small cavities.

DR. CABOT: Certainly the people who wrote the report of this X-ray examination had a considerable suspicion of tuberculosis. I should say, but that is based partly on fluoroscopic evidence and not wholly on the plates that we saw.

The report of the spinal fluid is not characteristic of tabes or bringing any support to the idea of syphilis.

The treatment is essentially that for a sick diabetic.

A point which I have often spoken of before is that diabetics will have tuberculosis with less cough and sputum and less complaint than any

other class of people. I remember a necropsy at which I was present when there had been no cough whatever, yet two-thirds of the lung at necropsy was solid with tuberculosis. Whether because they are weaker or for some other reason tuberculous diabetics show less than any other patients I know.

They recognized the abnormal breathing better after they had found the tubercle bacilli.

DIFFERENTIAL DIAGNOSIS

He died of tuberculosis—probably with sepsis elsewhere—and of diabetes—diabetes the primary thing. Of course we have no confidence of finding lesions in the pancreas. Fully half the cases that I have seen necropsied here have had no lesions demonstrated in the pancreas. It does not mean at all that the pancreas is not the origin of the disease, but only that the disease may show itself chemically and not physically.

I shall not undertake to say how extensive that tuberculosis is. If the X-ray cannot tell us the clinician can't. But my guess is that it is more extensive than we should think from that plate.

CLINICAL DIAGNOSIS (FROM HOSPITAL RECORD)

Diabetes mellitus.

Pulmonary tuberculosis.

DR. RICHARD C. CABOT'S DIAGNOSIS

Diabetes mellitus.

Pulmonary tuberculosis.

Septicemia?

ANATOMICAL DIAGNOSIS

1. Primary fatal lesion

(Diabetes mellitus.)

Tuberculosis of the lungs with cavity formation

2. Secondary or terminal lesions

Luetic aortitis.

Hypertrophy of the spleen.

3. Historical landmarks

Chronic pleuritis.

Slightly defective closure of the foramen ovale.

Chronic perihepatitis and perisplenitis.

Slight chronic peritonitis.

Slight hydronephrosis.

Hypertrophy of the middle lobe of the prostate.

Hypertrophy of the bladder trabeculae.

Dr. RICHARDSON: There were old pleural adhesions at the apex and posteriorly on the right, none on the left. Much pale froth was found in the trachea and bronchi. The left bronchi were negative except that a large branch leading to the upper part of the lower lobe opened into a

cavity in this region five cm. by three cm. in diameter. The cavity contained purulent material, and the cover-glass showed numerous typical tubercle bacilli. No definite tuberculosis was made out in the bronchial glands.

The right lung was voluminous, with much edema and in a few places grayish homogeneous areas cover-glass from which showed typical tubercle bacilli.

The coronaries were free but showed a little fibrosis. The first portion of the aorta showed some old luetic aortitis.

The spleen was slightly enlarged, but showed no definite tubercles. The kidneys were large—they run rather large in diabetes—but showed no definite lesions.

There was slight hypertrophy of the middle lobe of the prostate, an ovoid mass one and a half cm. long obstructing the urethra somewhat, and there was some hypertrophy of the trabeculae of the bladder.

DR. CABOT: I think he would not have got his tuberculosis or sepsis if he had been properly treated. From what we know about the treatment of diabetes today I feel that he was not treated as he should have been.

CASE 10432

First Entry. An unmarried Irish cook of thirty-seven entered January 16, 1913.

F. H. Good.

P. I. For two years she had felt a mass in the left lower quadrant which had steadily increased in size.

P. E. Abdomen. In the median line was a mass the size of a small melon, firm, smooth, movable with difficulty. Vaginal examination. The uterus appeared to be sharply retroverted, pressed into the hollow of the sacrum. The mass described above could be felt moving with the uterus and apparently attached to its anterior wall.

Blood. Leucocytes 16,000.

A double salpingo-oophorectomy and supravaginal hysterectomy with appendectomy was done. Pathological examination showed fibromyomata. The patient made a good convalescence and was discharged relieved February 10.

A year later she reported that she was in very good health and had worked every day for the past year.

Second entry, October 7, 1914. The chief complaint was cough.

P. H. She had measles in early childhood and a severe attack of pertussis at twenty-seven. For ten or fifteen years she had had attacks of dull aching pain in the muscles of the arms and chest, lasting about an hour, sometimes one or two attacks in a day, often none for months.

Cold or dampness brought on these attacks and warm applications usually relieved them. For two months in Ireland her skin was yellow. It was now clearing. Her bowels were constipated, not moving for three days without laxatives.

P. I. For nine months she had had slight hacking unproductive cough, dyspnea on exertion and some palpitation. When she first lay down she had a sense of oppression over the left

pulse of the heart not seen or felt. Measurements as shown in the diagram. P_2 greater than A_2 . A soft systolic murmur at the apex, a rough systolic heard best at the pulmonic area but also over the precordia. Pulse and arteries normal. $B. P.$, right 102/60-100/63, left 105/68.

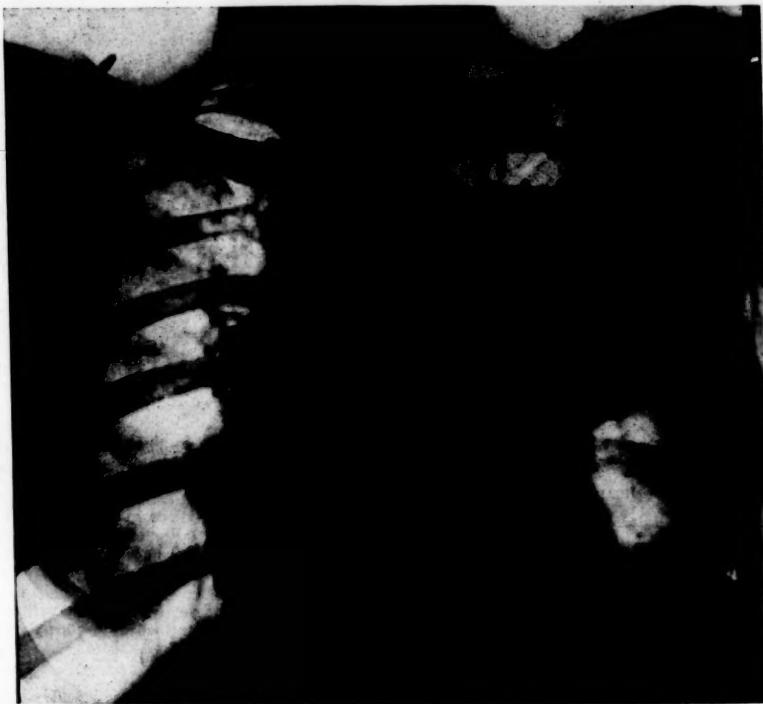


PLATE I. October, 1914. Shows a mass half the size of the heart shadow lying between the first and the fourth ribs on the left, more extensive behind than in front. Heart shadow slightly displaced to the right and perhaps a little large. Diaphragm high on the left, and its movements much limited. Apparently some thickening of the pleura in the left axillary region.

side of the chest from about the second rib to the costal margin, soon disappearing. She had no real orthopnea. On deep inspiration she had wheezing sensations in the chest. She had periods of weakness and was very easily fatigued at times. On certain days she felt exhausted, though generally the next day she would feel strong and well.

P. E. Well nourished. Mucosae slightly pale. Skin negative. One hickory-nut-sized lymph node in the left neck over the clavicle. Teeth all false except seven lower front ones. Apex im-

Radial tracings showed similar radials. *Lungs*. In the back diminished resonance over the left apex. At the left base an area of diminished resonance with increased voice and distant bronchial breathing up to about an inch below the scapula. Over the left upper lobe in front flatness, absent respiration, voice and whisper. Right chest normal. *Abdomen* negative except for the operation scar. Right kidney felt. *Genitals* not examined. *Extremities, pupils and reflexes* normal.

T. 98° - 100.2° . P. 101-72. R. normal. *Urine*. Normal amount, sp. gr. 1.022-1.012, cloudy at

four of six examinations, neutral at one, a trace of albumin at one, an occasional pus cell at one. *Blood.* Hgb. 80%, leucocytes 12,000-13,300, polymorphonuclears 81%, slight anisocytosis and some pallor of reds. *Wassermann* negative. *Stool.* Guaiac positive. *X-ray.* (See Plate I.) A mass half the size of the heart shadow lying between the first and the fourth ribs on the left. It was more extensive behind than in front. The posterior mediastinal space was obliterated. No pulsations were made out. Heart shadow slightly displaced to the right and perhaps a little large. Diaphragm high on the left and its movements much limited. Apparently some thickening of the pleura in the left axillary region.

After a delay of ten days on account of an afternoon temperature of 100° at intervals, a gland was removed from the neck for examination. October 24 the patient was discharged to the Out-Patient Department for X-ray therapy.

Records of the X-ray Therapy Clinic. November 14, 1914, the patient said she felt better. No

reaction was noted. November 21 she was very much improved and breathed more easily. December 12 she had gained weight and color and was breathing much better. December 31 considerable improvement was shown. A plate showed the mass in the chest diminished to about half the size before treatment. (See Plate II.)

During the following year the records of the clinic showed seventeen visits and at least nine treatments.

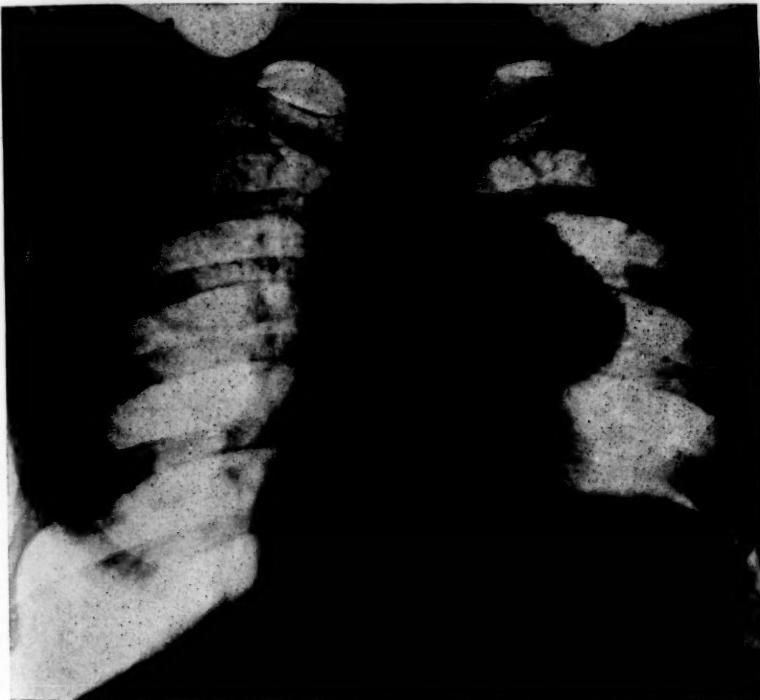


PLATE II. December, 1914. The mass in the chest is diminished to about half the size it was before treatment.

April 8, 1915, the diaphragm was still high on the left. June 23 there was marked reduction in the size of the tumor. September 30 the mass had diminished considerably since the previous examination. The diaphragm was still high and rigid. There was beginning enlargement on the right, seen best from behind. October 29 the mass to the left of the heart had practically disappeared. The diaphragm, however, remained high on this side. December 22 the tumor had diminished since the last plate.

During the next year six visits and three treatments are recorded.

October 30, 1916, the mass in the left chest had almost disappeared. The diaphragm was still high on the left.

May 24, 1917, the plate showed the mass in the region of the left hilus distinctly smaller than at

plate the appearance suggested the possibility of a mediastinal growth overlapping the heart.

The patient was not seen again until February 1, 1924. At that time the fluoroscope showed that both lung fields lighted up well. The diaphragm

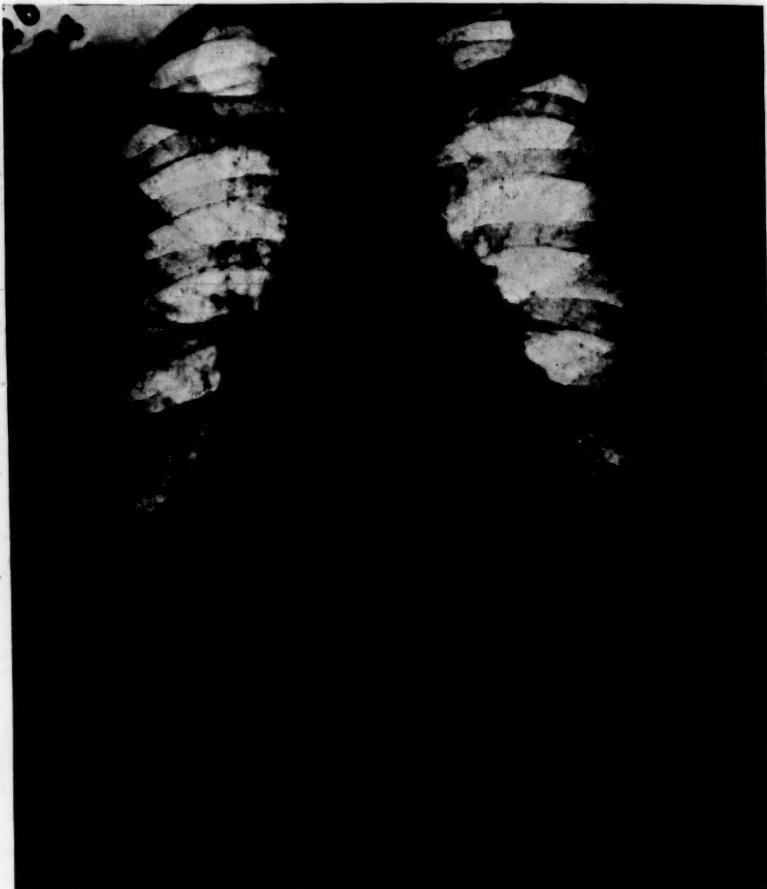


PLATE III. February, 1924. The central shadow is increased in width across the upper portion of the heart shadow. This increase seems due to an area of density projecting beyond the heart shadow in the region of the right lung root. A line through this shadow suggests the normal shadow of the outline of the right side of the heart seen faintly. The abnormal shadow in the left chest has practically disappeared. There is now a small area of increased density in the region of the left lung root which has changed since the previous observation and which shows remarkable improvement in appearance.

the last examination. The diaphragm on the left had returned to nearly its normal position. The shadow of the heart area was distinctly enlarged over the previous examination. In the fluoroscopic examination the outline of the shadow was apparently the left border of the heart. In the

was normal in position, outline and excursion. The costophrenic angles were clear. The posterior mediastinal space was not obliterated. On the plate (Plate III) the central shadow was increased in width across the upper portion of the heart shadow. This increase seemed to be due to an

area of density projecting beyond the heart shadow in the region of the right lung root. A line through this shadow suggested the normal shadow of the outline of the right side of the heart seen faintly. The abnormal shadow in the left chest had practically disappeared. There was now a small area of increased density in the region of the left lung root which had changed since the previous observation and which showed remarkable improvement in appearance. The blood appeared to be in fairly good condition. The red cells showed fair uniformity in size, a moderate amount of achromia. The white cells were definitely diminished in number, approximately 3,000-4,000. "I should judge there are probably 6% polynuclears with 25%-30% lymphocytes and an occasional mononuclear with a rare eosinophil. The platelets seem definitely diminished."

DISCUSSION

BY DR. GEORGE W. HOLMES

This patient's present illness probably dates from her second admission to the hospital. I do not believe that the previous operation has anything to do with the present complaint. She has been under observation and X-ray treatment at this hospital or at another Boston hospital since November 14, 1914. Except for the first few months she has been able to carry on her work as cook and has been in fairly good health. At the time the treatment was begun the dyspnea was severe enough to prevent her working.

This is the longest period of observation for this disease we have in our records. There are no cases of this type so far as I know which have been cured by radiation therapy or any other form of therapy, and we have no definite proof that life has been greatly prolonged. On the other hand, as is well shown in this case, the period of time for which these patients are able to work and are symptom-free under radiation therapy is very much extended. In other words, while we are unable to cure the disease or prolong life we make the patient self-supporting and happy.

The patient received her first treatment on November 11, 1914. The chest was divided into a number of small areas and each area given about an erythema dose of medium length X-rays, 4 millimeters aluminum filter, 9 inch spark gap. The first series of treatments was completed November 14. She had two treatments in December and at the end of this month showed very definite improvement. (See Plate II.)

In general the treatment of these cases by radiation should I believe be confined to alleviation of symptoms. No attempt should be made to cure the disease. Working with this idea in mind it is unwise to give large doses at any one sitting or to treat large areas of the body in a short space of time. The pathological lymphoid

tissue is very easily affected by the radiation, and with large doses breaks down rapidly and may produce a severe general reaction on the part of the patient. With smaller doses the absorption of these masses is slower and there is little or no general reaction. The constant careful observation by a physician who is familiar with these diseases is a large factor in their successful treatment. The periodical examinations should include blood studies and X-ray examinations of the chest. The blood picture may be of considerable value as a guide to the treatment. In no case should treatment be given when the leucocyte count is abnormally low. Favorable results have been obtained with practically all types of radiation, from the extremely short waves of radium to the moderately long waves in low voltage X-ray therapy. The modern type of high voltage X-ray apparatus offers special advantages in handling these cases, I believe. With this large supply of rather short wave radiation it is possible to give a sufficient dose to the deep structures of the body to bring about satisfactory results without injuring in any way the overlying tissues, so that patients may be treated over long periods of time without injury to the skin or other superficial structures. As already indicated, the intensity of the treatment will depend largely on the case. At all times it is better to under- than overtreat.

The point of especial interest in this case is the long duration of life after the first symptom,—ten years, during which time the patient has been able to carry on her work in the usual manner.

X-RAY INTERPRETATIONS

October 8, 1914. "Mediastinal tumor which is obstructing the left bronchus; probably not aneurism."

February 1, 1924. "The findings are suggestive of a mass or glandular tumor in the region of the right lung root, perhaps the residue of the old tumor previously described."

PATHOLOGICAL REPORT, SECOND ADMISSION

Examination of gland removed from neck shows malignant lymphoma.

CLINICAL DIAGNOSIS

Hodgkin's disease.

CASE 10433

A Greek laborer of fifty-five entered April 1. The only history recorded was obtained in the Out-Patient Department, where evidently an interpreter was available.

P. I.: Six months before admission the patient was operated upon at a hospital for jaundice of a year's duration. Ever since the operation he had drained daily one or two pints of thin yel-

lowish fluid through the abdominal sinus. He said that some similar fluid passed by rectum also.

The surgeon who performed the operation reported by telephone that the patient came into the hospital profoundly jaundiced, with clay colored stools. The case was considered hopeless. Since he did not die after two weeks, however, he was transferred to the surgical service for exploratory laparotomy, with a pre-operative diagnosis of possible malignancy of the head of the pancreas, or possibly infectious jaundice, as he ran a septic temperature as high as 104° with a chill every day or two. At operation the gall-bladder was found to be slightly enlarged and tense, full of black bile; no stones. The pancreas, stomach and common duct were pronounced normal. The gall-bladder was drained. The common duct was not probed. The drainage continued, but apparently decreased. The jaundice cleared up, and the stools, while still light, showed undoubted pigmentation. Soon after he left the hospital the sinus closed up once or twice for twenty-four hours at a time, on each occasion with partial recurrence of the jaundice. The surgeon had nothing definite to say about the cause of the jaundice.

P. E. A fairly well developed, poorly nourished man with his abdomen swathed in many layers of bile-soaked rags. A right cervical gland the size of a small walnut. Lungs clear. Heart. Apex not found. Sounds of only fair quality. P_2 unusually loud. Radials palpable. Abdomen prominent. High right rectus operation scar, tight except at a point two finger breadths above the umbilicus, where a pea-sized papilla admitted a little stream of thin yellow-greenish fluid. Above and to the left of this opening could be felt a thickening attached to a round mass extending below the right costal margin, in turn attached to the liver. This region appeared slightly tender on deep palpation. To the left of the midline, on a level with the sinus, was an area where nothing could be felt, but there was real tenderness with spasm. The skin of the right lower quadrant showed a dermatitis. Genitals and extremities showed nothing of significance. Rectal examination. External hemorrhoids. Prostate unusually firm, not stony hard or irregular. Pupils slightly irregular, otherwise normal. Reflexes. Left knee-jerk much less active than right.

Before operation $T. 98.6^{\circ}-100.5^{\circ}$, $P. 78-100$. $R.$ normal; urine, amount not recorded, sp. gr. 1.020, no albumin or sugar; blood not recorded. Wassermann negative. Coagulation time 4.5 minutes. Bleeding time 2-3 minutes. Stool. Clay colored, soft. Guaiac negative.

The drainage continued briskly. April 5 operation was done. He made a good ether recovery. The next day he had slight productive cough. The dressings were soaked with bile.

April 7 the temperature was up to 100° and the pulse to 130, but of good quality. He still drained very little bile through the tube, but the dressing was soaked. There was frank sepsis in the lower end of the wound. Several skin stitches were taken out. There was tenderness and spasm in the right lower quadrant, accompanied by pain. There was some distension. April 9 the temperature fell from 101.1° to 99.4° , the pulse from 135 to 120; the wound drained considerable bile and oozed a little blood. The stools were tarry; guaiac markedly positive. For the next three days the amount of blood increased. The systolic B. P. was 100. The wound became very foul and seemed to be breaking down.

April 11 transfusion of 500 c.c. of blood was done by the Vincent tube method. Three days later the wound was still very foul and there was considerable serous discharge; very little bile drainage. The temperature ranged from 99.5° to 103.6° . The patient was fed fresh bile. There was less oozing. April 13 the general condition seemed better, and the abdomen was soft and not tender.

April 14 he became cyanotic, with very weak pulse and blood pressure 95/55. He was given fifteen grains of caffeine with good result. There was still oozing. The dressing was soaked with bile and foul serum. An attempt was made to clean up the wound with hydrogen peroxide. The general condition was very poor. The patient would not tolerate the Rehfuss tube by which bile was to be fed. The tube was discontinued and ox gall started by mouth. April 15 the general condition seemed better. The stools showed bile but no blood. The pulse was better, and the patient was taking fluids fairly well. April 17 he seemed a little weaker. The temperature began to rise, and continued to rise gradually, reaching 104.7° on the 20th and 21st. Two large blood clots were removed from the wound, which looked cleaner and drained bile. The respirations were 31-44, the pulse 120-149. The patient had hiccup. There were a few râles in the right base. April 19 there was drainage of considerable thin yellow serum believed to be duodenal contents. A suction apparatus was used and worked well. The wound was wide open. The patient continued to have occasional hiccup. The fistula drained about eight pints daily. He had poor appetite. April 21 the temperature began to fall, reaching 98° on the 23rd, then rising to 100.9° the day of death. The pulse fell to 120 and rose to 149 on the same day. Profuse drainage continued through the fistula. April 23 he was vomiting and complained of pain in the upper end of the wound. Early the next morning he died.

DISCUSSION

BY DR. EDWARD L. YOUNG, JR.

If he had no other symptoms than jaundice of course the first thing that comes to mind on

long continued painless jaundice is what they assumed at that hospital, and that was malignancy. On the other hand it must be remembered that stone can be present and cause complete obstruction without the patient's having or ever having had any pain at all. So that it is not fair to refuse the patient the benefit of operation simply because of painless jaundice. It does not seem quite fair either to make a diagnosis of infectious jaundice just because of temperature and chill, because in the presence of obstruction there is invariably some infection if the obstruction is due to stone and the cholangitis present very often causes symptoms such as these.

The work that has been done in this hospital in the last year or two suggests that some of the cases of infectious jaundice do last for a much longer time than the traditional few weeks. On the other hand, a year is a long time, and it does not generally give this story. Here we have the story of a year and a half. He had had a year's symptoms before he was operated, and that was six months before the beginning of this record.

His dermatitis is due to the continued presence of bile.

The coagulation and bleeding time are interesting in view of the long duration of the jaundice. They show that the jaundice as such is not a condition which results in grossly delayed coagulation and bleeding time. Of course the basic principles we think of with a draining sinus coming from any hollow viscus are, first, is there an obstruction in that hollow viscus below the opening of the sinus; in this case, is there an obstruction below in the cystic duct? No, because then there would be very little bile coming through; it would be just the watery secretion of the bladder itself. In the common duct below the cystic duct? That is the commonest thing. We see persistent biliary sinuses occasionally, and of course nine out of ten are due to the fact that there is a stone left behind. Occasionally one is due to the scar tissue where the original operation has removed stones but caused much trauma; occasionally after cholecystectomy to a common duct occluded by a tie. Is it malignant disease? It seems rather hard to assume malignant disease at this stage of the game, because he had had it a year before operation, the surgeon found nothing, and he has since had six months of drainage. Is there any mechanical cause, that is to say a cavity that comes of mechanical conditions, as in the chest, so that it cannot shut down and fill up the cavity? It seems hard to think that there can be anything of that sort here. Is it a very unusual type of infectious jaundice? Again that seems very hard to fit in with the picture given us here.

It seems to me on the theory of chances there is either a stone in the common duct, down in

the papilla, perhaps, or that there was originally a malignant disease of the ampulla of Vater or perhaps an undiscovered malignant disease of the head of the pancreas which may have grown more slowly than we should expect. If the surgeon had put a probe through into the duodenum, that should have ruled out a stone there. On the other hand it is very easy for a stone in the hepatic duct to be left and that stone later to come down. It seems to me that the diagnosis here would come down either to a stone left behind, or to a slow-growing malignant disease, of the papilla perhaps. That is unusual, but it does occur. It may possibly be of the head of the pancreas.

I do not see that there is anything to do but to go in and see if there is a condition which can be remedied. If it is malignant disease there is no help, of course; if it is a stone it ought to be fixable. If it is some unusual type of infectious hepatitis there is nothing further to be done than what is being done. From my point of view I should say that I should go in with the idea that there is an obstruction which can be removed, that the man is in very poor condition, that he needs preliminary treatment with forced fluid, forced nourishment, bile by mouth for a few days, and with general anesthesia—gas-ether—and a hope that there is a condition which can be helped.

DR. YOUNG'S PRE-OPERATIVE DIAGNOSIS

Stone in the common duct; biliary obstruction.

PRE-OPERATIVE DIAGNOSIS

Biliary fistula.

OPERATION

Gas and ether. The biliary sinus was dissected sufficiently to allow it to be ligated and was then thoroughly swabbed with iodine. By probing the sinus it was found to extend to the gall-bladder, which seemed to be dilated and enlarged. An incision about six inches long was made in the right upper quadrant over the rectus muscle including the sinus, and the muscle fibers were split. The common duct was exposed after difficult dissection of many dense adhesions. The duct was markedly dilated, and was filled with debris, small gall-stones and thin detritus. The probe could not be passed into the duodenum. The head of the pancreas was moderately thickened, but did not suggest carcinoma. After thorough irrigation of the common duct a catheter was fastened into the duodenum with purse string sutures to the distal portion and projecting about six inches into its lumen, the proximal end fastened into the common duct, and the duct sutured over it. The operation lasted about three hours. The patient returned to the ward in a moderate degree of shock.

FURTHER DISCUSSION

DR. YOUNG: Had you any idea why the papilla was blocked?

DR. LINCOLN DAVIS: No; we simply could not go through.

DR. YOUNG: It does not seem to me possible that that obstruction could have been malignant from the start. An attempt was made to give drainage from the common duct into the duodenum.

DR. CABOT: At this point did you believe it was a case of gall-stones?

DR. DAVIS: The common duct was full of detritus, but I thought it was something more than a gall-stone. I thought it was either a cicatricial stenosis or malignant disease.

DR. YOUNG: Cicatricial stenosis would be gall-stones primarily, and even with a carcinoma of the pancreas or bile duct, which is notoriously slow-growing, isn't a year and a half pretty long not to be able to find something definite?

The attempt was made to sidetrack the drainage into the duodenum, which if it went through all right would overcome that obstruction.

Of course it is natural that the dressings should be bile-soaked at first, but by April 9th some bile was coming through into the intestinal tract from the drainage.

Of course we have to realize that this man is in very poor shape and his tissues are of low resistance. Eight days after operation it looked as though they were going to get by.

I should say that he just did not have strength enough to go through with the slight amount of sepsis that was there. I think Dr. Richardson will tell us that there is a little localized sepsis, but not much. The wound is broken down to a certain extent, as we should expect with local resistance, and I still believe that will be stone. I do not see what else at this man's age would suddenly shut down and make trouble. Of course it may be sear, but if sear it is sear from the stone. And then there is the sepsis, the exact degree of which we cannot tell, and the evidence of obstruction from stone past or present. I do not know what more to say. Is there anything you would like to add, Dr. Davis?

DR. DAVIS: I think you have described it very well. We made an attempt to sidetrack the bile into the duodenum by another passage, —McArthur's method of using a catheter, suturing the catheter into the duodenum and letting it hang down six to eight inches into the duodenum, the proximal end fastened in the common duct, the idea being that the end of the catheter being free peristalsis will catch hold of it and pull it through eventually, and meantime a direct channel is established. In this case the common duct was distended and full of rather purulent material and the suture did not hold. The wound became infected and the whole thing gave way. It resulted in a duodenal fistula, which I think is almost the worst thing in sur-

gery. There is nothing more terrible, because the patients starve to death.

This man was not a very good subject for operation. When his wound broke down and he began to have hemorrhage the jig was about up, and when he finally got a duodenal fistula it was completely up. We took a rather big risk in trying operation in such a case; but he had had this fistula for a long time and he did not want to be left with it. He came in to get rid of it. It might possibly have been better to unite the gall-bladder to the stomach, which is a much easier procedure; but with an already established sinus it might not have worked.

CLINICAL DIAGNOSIS (FROM HOSPITAL RECORD)

Stone in common duct.

Duodenal fistula.

Choledochoduodenostomy.

Transfusion.

DR. EDWARD L. YOUNG'S DIAGNOSIS

Stone in the common duct.

Sepsis.

Duodenal fistula.

ANATOMICAL DIAGNOSIS

1. Primary fatal lesion

Small colloid adenocarcinoma of the common bile duct.

2. Secondary or terminal lesions

Dilatation of the bile ducts.

Slight biliary cirrhosis.

Slight icterus.

Bronchopneumonia and edema of the lungs.

Fibrinopurulent pleuritis.

3. Historical landmarks

Choledochoduodenostomy.

Chronic peritonitis.

Slight chronic pleuritis.

DR. RICHARDSON: This man was well developed, fairly nourished. There was slight icterus of the skin and a slight yellowish tinge to the conjunctiva.

The fecal material in the large intestine was a silver gray color.

On each side there was fibrinopurulent pleuritis and bronchopneumonia of each lung.

There was thickening of the wall of the common bile duct at the point mentioned. The pancreas immediately associated with that looked a bit suspicious over a very minute area. A portion of that was taken and it turned out to be adenocarcinoma of the common bile duct. In the common bile duct there were a few tiny fragments of concretions. Those were all the concretions that we found. The tumor of the common bile duct extending for a slight distance into the head of the pancreas caused, we thought, the contraction.

DR. YOUNG: Did that start in the common bile duct?

DR. RICHARDSON: Yes. Then the ducts above, including the hepatic and cystic ducts, especially the hepatic, and the radicles in the liver, were markedly dilated even to the periphery of the liver, but they were free. The material in the duct at the time of operation was like tiny fragments!

DR. DAVIS: Yes. There was a lot of thick grumous material with little concretions in it.

DR. RICHARDSON: These looked as if they might have been of that sort, but they were pretty well washed out. The catheter was *in situ* at the time of necropsy. There was no acute peritonitis,—chronic of course—and the sinus was draining well.

In the liver there was a slight biliary cirrhosis, not very marked.

DR. YOUNG: That was a very slow-growing thing. It must have been two years, because there was complete obstruction for a year and a half.

DR. CABOT: You must have been glad to hear that it was malignant disease in the end, so that you could not do anything.

DR. DAVIS: I think it is the hardest thing to distinguish malignant disease of the pancreas from inflammatory. I can remember how Dr. Maurice Richardson used to come out here and palpate, trying to determine that point. I don't think anybody can tell; it is always a guess.

DR. CABOT: It is worth remembering that with this very loud systolic murmur the heart was normal.

DR. YOUNG: In view of the fact that the symptoms date back so far and that small stones were present the question arises as to whether the original condition might not have been stones without malignancy, and because they were not removed the malignancy developed as a later phase of the chronic irritation.

CURRENT LITERATURE

ABSTRACTORS

GERALDO M. BALBONI	TRACY MALLORY
WILLIAM B. BREED	HERMAN A. OSGOOD
LAURENCE D. CHAPIN	FRANCIS W. PALFREY
AUSTIN W. CHEEVER	EDWARD H. RISLEY
RANDALL CLIFFORD	GEORGE C. SHATTUCK
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FRED S. HOPKINS	WILDER TILESTON
CHESTER M. JONES	HENRY R. VIETS
CHARLES D. LAWRENCE	SHIELDS WARREN
BRYANT D. WETHERELL	

TUBERCULOSIS OF THE LARYNX—ITS DIAGNOSIS AND TREATMENT

PENTECOST, R. S. (*Canad. M. A. J.*, 14:674, August, 1924), summarizes as follows: Early recognition of

tuberculous involvement of the larynx is most desirable, and regular laryngological examinations should be made of all patients suffering from pulmonary tuberculosis. The policy of "laissez faire" should be replaced by active local treatment. A large percentage of cases of laryngeal tuberculosis may be completely arrested by the employment of the following measures: (1) Hygiene and dietetic treatment. (2) Absolute vocal rest. (3) Appropriate treatment of any associated pathological condition in the upper respiratory tract. (4) Heliotherapy. (5) Application of the galvano-cautery to the affected areas in the larynx.

[A. W. C.]

THE COMPLEMENT-FIXATION TEST FOR SYPHILIS

CHAPMAN, O. D. (*Arch. Derm. and Syph.*, Vol. 9, No. 5, May, 1924), made numerous comparative tests of the Wassermann reaction of the blood obtained by ordinary methods and dried on filter paper. He finds that blood collected by the latter method can be successfully used and may be kept at least one month with little deterioration of its complement-fixation power. He is carrying out further tests to determine the reliability of this method.

[A. W. C.]

THE TREATMENT OF PSORIASIS WITH INTRAVENOUS INJECTIONS OF SODIUM SALICYLATE

MALONEY, E. R. (*Arch. Derm. and Syph.*, Vol. 9, No. 6, June, 1924), used intravenous injections of sodium salicylate in 20 patients with psoriasis. He found the results disappointing, only slight benefit derived in any case, and obtaining no cures. He feels that the use of salicylic acid externally would be just as efficient as sodium salicylate intravenously.

[A. W. C.]

THE ADJUVANT TREATMENT OF SYPHILITICS

MICHEL, L., and GOODMAN, H. (*A. J. Syphilis*, 8:598, July, 1924), strongly emphasize the need of individualization in the treatment of syphilis. Nervous depression must be relieved by suggestion and optimistic outlook for cure; and if, as sometimes happens, mental depression and sluggishness are due to anemia of the early generalized syphilis, they should be helped by iron tonics, while some patients need to be shown the seriousness of the disease in order to induce them to continue treatment, especially after a negative Wassermann reaction has appeared. As regards diet, alcohol should be prohibited; green vegetables, salads and fruits should be taken in moderation while mercury is being given, as they may increase the tendency to gastro-intestinal difficulties. Liquids should be pushed and constipation carefully avoided. The mouth and teeth should be kept in proper condition and tobacco forbidden in the early stage and whenever oral lesions occur. Iron and strichnine tonics are frequently useful; occasionally in the early stages gonad or other endocrine deficiencies occur and may be helped by judicious use of appropriate glandular extracts. The kidneys and blood pressure should be carefully watched.

[A. W. C.]

PAROTID CALCULI

IRVINE, W. H. (*Canad. M. A. J.*, 14:392, May, 1924), reports a case of this rare condition, occurring in a man, aged 23, who had had a tumor at the left angle on the jaw for twelve years or more, which had reached the size of a hen's egg. The tumor was opened and twelve calculi were found within, the small ones being in the duct. They varied as to size, from that of a pin head to that of a pea, were hard, rough, and nearly spherical, and somewhat faceted.

On chemical analysis they proved to be composed of phosphate, covered with fibrin.

[A. W. C.]

ALKALEMIA (ALKALOSIS)

ELLIS, A. W. M. (*Quarterly Journal of Medicine*, July, 1924), discusses this important though somewhat neglected topic, and reports four illustrative cases, all showing an uncompensated alkali excess with high plasma bicarbonate and increased pH of the blood. Two of these were due to overdrugging with soda bicarbonate, the other two to high intestinal or pyloric obstruction.

The symptomatology of bicarbonate poisoning included irritability, headache, nausea and vomiting, loss of appetite, and, in one case, stupor and tetany with a normal figure for blood calcium. Similar symptoms have been noted by others during the alkali treatment of peptic ulcers and show the need of caution in the use of this drug.

The two cases resulting from high obstruction are of even greater interest. One of these was a cancer of the pylorus with gastric tetany, the other apparently acute idiopathic gastric (and duodenal) dilatation. Both showed a marked diminution of the plasma chlorides, a very high plasma bicarbonate, increased alkalinity of the blood, and a very high blood urea. A discussion of the theory of these changes follows. Since the drop in chlorides precedes the occurrence of vomiting in intestinal obstruction, the cause cannot be the loss of HCl with the vomit; moreover, in the case of carcinoma the vomitus contained no HCl. The alkalemia appears to be the result of the diminution of the blood chloride. The high blood urea may be due either to destruction of protein by a toxic substance, or to renal insufficiency.

The tetany of bicarbonate poisoning and of pyloric obstruction is considered to be due to the alkalemia. In this connection the work of N. Morris is of interest. He found that in alkalemia there is also anoxemia, and that any condition leading to anoxemia causes an increased electrical irritability of the neuro-muscular apparatus. It is probable that the cyanosis and dyspnea met with in these cases also may be due to anoxemia.

From a diagnostic point of view both the high blood urea and the low plasma chlorides are of importance in intestinal obstruction, no matter at what point of the canal the obstruction is situated.

The treatment of the alkalemia of gastro-intestinal obstruction is satisfactory if begun early. It consists in the intravenous use of normal saline to restore the chlorides to a normal figure, and the administration of ammonium chloride in two per cent. solution by the rectum. In poisoning by sodium bicarbonate withdrawal of the drug is usually sufficient; if stupor and tetany have set in, calcium should be given intravenously and by mouth, and ammonium chloride by mouth or rectum. The latter, as Haldane has shown, tends to change the reaction of the blood towards the acid side, because the NH₃ ion is converted to urea, while the Cl⁻ ion is absorbed into the blood stream.

[W. T.]

CONGENITAL PANCREATIC DISEASE WITH INFANTILISM

This rare type of pancreatic disease, reported by CLARKE and HODFIELD (*Quarterly Journal of Medicine*, July, 1924), is of interest as illustrating the relationship of the Islands of Langerhans to carbohydrate metabolism. The patient, a girl four years of age, had passed large, greasy stools since infancy, and, in spite of a voracious appetite, was undernourished and undersized. The stools showed large amounts of gross and microscopic neutral fats. The urine was free from sugar. Death occurred from

diphtheria. Post-mortem examination showed the pancreas to be very small, the acini nearly absent, while the Islands were present in normal number. The absence of inflammatory changes makes it probable that the condition was one of congenital aplasia, in which case it would seem that the acini and the Islands of Langerhans are separate from the developmental point of view.

[W. T.]

CHYLURIA

LOWER, W. E., and BELCHER, G. W. (*Surgery, Gynecology and Obstetrics*, August, 1924).

These authors report a case apparently successfully treated with neosalvarsan. They state that searches for parasites were negative, in spite of the fact that the patient was Chinese and had an eosinophilia of 5 to 7 per cent. Posture had no effect on the condition. Diet caused little change. Increasing the fat intake did not increase the fat output. A fat-free diet lowered the fat output a little. The differential phenolsulphonphthalein test showed a normal left kidney (chyluria side). The pyelogram was not pathological. Neosalvarsan was directly followed in a few days by complete disappearance of fat, as well as red blood cells, from the urine. On the date of his last visit the patient had remained fat-free and showed no hematuria for one and two-thirds months, although the eosinophilia had persisted.

[E. H. R.]

VASCULAR TUMORS OF THE INTESTINE

BROWN, A. J. (*Surgery, Gynecology and Obstetrics*, August, 1924).

Brown reports a case of his own with operative findings and briefly cites the literature. He has found only 19 cases of vascular tumor of the intestinal tract below the stomach. These include all forms of vascular tumor, varying from capillary naevi to cavernous angioma. He gives a brief abstract of these 19 cases. There seems to be no particular age at which these tumors are more prominent. They are mostly single. In two cases the tumor was in the duodenum, in 11 in the small intestine. Seven cases gave no symptoms. Six suffered from gastric or intestinal hemorrhage. The author briefly discusses the histology and pathology.

[E. H. R.]

CHILD-BEARING AFTER RADIUM AND X-RAY TREATMENT

PEMBERTON, F. A. (*Surgery, Gynecology and Obstetrics*, August, 1924).

Pemberton briefly discusses this subject and finds from evidence in a clinic at the Free Hospital for Women in Brookline, Mass., that a patient can be treated with radium or X-ray and bear normal children subsequently. It is not evident that deformed or underdeveloped children are likely to follow such treatment, but it does seem that the chance of miscarriage is greater than in untreated women. Care should be taken not to treat pregnant women, because it may cause a poorly developed or deformed child. The author believes that more evidence on this subject is very much needed.

HERNIAL TUBERCULOSIS

WATSON, LEIGH F. (*International Clinics*, 1923, Vol. 1, S. 33, pp. 230-235).

The diagnosis of hernial tuberculosis is seldom made except at operation unless lesions exist elsewhere, such as in the abdominal viscera, peritoneum, genital organs, spine, bones, joints, lungs, or meningies. The outlook is ordinarily grave because the patient often dies from the primary lesion. In chil-

even a congenital tuberculous hydrocele is often mistaken for a simple hydrocele. If the tuberculous hernial contents are thoroughly exposed to the air, improvement generally follows, and sometimes healing of the local condition. Peritoneal tuberculosis is nearly always present also and should be dealt with through a second incision. In addition to the operative treatment, the usual measures employed to combat tuberculosis are necessary.

DANGERS OF TAXIS IN STRANGULATED HERNIA

WATSON, LEIGH F. (*International Clinics*, 1924, Vol. 2, S. 54, pp. 217-219).

Taxis is little used at the present time because of its dangers and the fact that there is a much lower mortality rate if operation is performed as soon as the diagnosis is made and without attempts at manual reduction. Contrary to the general opinion, if the hernia cannot be reduced in five minutes by moderate pressure, it is inadvisable to continue taxis longer. Taxis is aided in infants, children and adults by suspending them by their feet, head downward.

Taxis is contraindicated when the hernia has been down several hours; when the onset is acute and the symptoms severe; when previous attempts at taxis have failed; when the hernial coverings are edematous; when there are symptoms of prostration and shock, and when there are signs of ulceration and gangrene.

If taxis is apparently successful the patient is not out of danger for several days and should be watched carefully for symptoms of reduction "en masse," hemorrhage, and delayed perforation of the intestine.

THE EPIDEMIC OF VIRULENT SMALLPOX IN WINDSOR AND THE VICINITY

ADAMS, F. (*Canad. M. A. J.*, 14:692, August, 1924), reports an outbreak of smallpox in February, 1924, in Windsor, which soon spread to neighboring cities, including Detroit, which was unusually virulent, but yielded, as all smallpox does, to vaccination. A study of the epidemic shows that no one vaccinated successfully within twelve years contracted smallpox; no one ever vaccinated successfully, no matter how long ago, died of smallpox; of the smallpox cases in persons who had never been successfully vaccinated, 71 per cent. died; vaccination of almost the whole population stopped the epidemic abruptly and completely.

[A. W. C.]

A CASE OF GALACTORRHOEA

CAMERON, A. T., FERNIER, H. J., and THORLAKSON, P. H. T. (*Canad. M. A. J.*, Vol. 14, No. 6, June, 1924), describe a case of galactorrhea of unknown etiology, the patient being otherwise apparently normal in every respect. No endocrine abnormality could be detected. The milk was of extremely abnormal composition, with high total solid, fat, and protein, and low lactose content. X-ray treatment afforded immediate relief of pain, and induced cessation of milk-flow.

[A. W. C.]

TWO METHODS OF WASHING ECZEMATOUS HANDS

GLAZER, A. L. (*Arch. of Derm. and Syph.*, 8:621, May, 1924), offers two methods for cleansing eczematous surfaces, without increasing the inflammation. The latter part of the article is quoted in full as follows: A liberal quantity of olive or sweet almond oil is to be poured into the palm and thoroughly but

gently smoothed and worked into the skin of the hands; this done, a small portion of the yolk (the yellow part of one egg will serve for from 20 to 30 cleansings if used economically) is added, and the two briskly worked into an emulsion exactly after the manner of lathering the hands with soap. The addition of a few drops of water aids at this stage, producing a thin, creamy white to dark suspension, according to how badly the hands are soiled. The parts, rinsed now with cool water, are left soft and clean, without visible oiliness when dried. After a few essays patients become adept and can perform the operation as quickly as with soap and water. The writer has found the plan of demonstrating to prospective user excellent.

For cured cases of eczema of the hands, or for persons with unduly dry skins and tendency to chapping in cold weather, trial has proved the following modification of the oil and egg method valuable: The liquid almond or olive fat is first thoroughly worked into the skin and then, instead of the egg yolk, a mild soap is employed, using just enough, together with sufficient water, to produce a milky, saponified emulsion without lathering. Rinse with cold or cool water. By this means the skin is largely spared the ill effects of the alkali, as clinical results in the prevention of chapping demonstrate.

[A. W. C.]

JACK-KNIFE POSITION AFTER HERNIA OPERATIONS

WATSON, LEIGH F. (*Annals of Surgery*, August, 1924, lxxx, pp. 239-241).

The posture of the patient after an operation for hernia is usually neglected. If surgeons realized that they could reduce their recurrences materially, besides adding to the comfort of their patients, the jack-knife position would become a matter of routine for inguinal, femoral, umbilical and ventral hernias which presented difficulties in closing the fascial layers.

In inguinal hernia operations the best exposure is obtained by keeping the thigh extended until the deep sutures are ready to be tied, when it should be elevated, adducted and rotated inward. This reduces the distance between Poupart's ligament, the internal oblique and conjoined tendon from 25 to 50 per cent., depending on the size of the opening, the variety of hernia, and the development of the muscles. After the patient is returned to bed his knees and shoulders should be elevated 25 to 45 degrees by means of pillows and a back rest. This position takes the strain off the stitches during the process of repair, permits a broad, firm union of fascial flaps, and reduces the percentage of recurrences. The jack-knife posture should be maintained as long as the patient stays in bed.

CLINICAL AND PATHOLOGICAL OBSERVATION ON GASTRIC SPHYLIS

BRAME, W. A., and BLOCH, L. (*A. J. Syphilis*, 8:569, July, 1924), conclude as follows:

1. Syphilis of the stomach is probably more common than ordinarily supposed.
2. The most common clinical manifestations of gastric syphilis are abdominal pain, anacidity or achylia, loss of weight and strength, evidence of luetic infection or a positive Wassermann reaction and response to antisyphilitic treatment after ordinary measures have failed to benefit the patient.
3. The clinical course will depend on the nature of the luetic process which is present and may be ulcerative, tumefactive, stenotic or of the limitis plastica type.
4. The anatomic characteristics consist of a thickened submucosa, perivascular infiltrate, military granuloma, pan-arteritis and pan-phlebitis and diffuse lymphocytic infiltrate. The ulcers when present are

usually shallow, multiple and irregular and seldom extend below the submucosa.

5. All cases which are considered as inoperable carcinoma should receive the benefit of antiulcer treatment. Other cases which are considered as carcinoma should receive a short but intensive course of specific treatment, but operation should not be delayed too long.

[A. W. C.]

TOXICITY AND REACTIONS CAUSED BY ARSPHENAMIN AND NEO-ARSPHENAMIN

RAIZISS, G. W., and BROWN, H. (Arch. Derm. and Syph., Vol. 10, No. 1, July, 1924), in testing drugs commonly used in syphilis, found that large doses of arsphenamin (about one-half of the maximum tolerated dose) cause acute nephritis, which generally clears in from 10 to 16 days, while the repeated normal therapeutic doses do not disturb the renal function at all. Single large doses of about ten times the normal therapeutic amount of neo-arsphenamin produce an acute nephritis which clears up in a few days, the latter drug in therapeutic doses being more than twice less injurious to the kidneys than arsphenamin. Small doses of the organic mercurials proved very harmful to the kidneys, especially when injected intravenously even in small doses. Intramuscularly much larger doses may be given with little or no injurious effect on the kidneys, although the latter may be slow in appearing and must be guarded against. It is possible that many of the reactions following the administration of arsphenamin and other drugs of that group are only secondary manifestations, resulting from injuries sustained by the kidneys. Great attention should therefore be paid to the renal function, both before and during treatment.

[A. W. C.]

OSSIFYING SARCOMA OF THE SKIN METASTATIC FROM OSSIFYING SARCOMA OF THE HUMERUS

FINNERUD, C. W. (Arch. Derm. and Syph., 10:56, July, 1924), describes in detail, with numerous photomicrographs, a metastatic case of this condition believed to be unique in the literature.

[A. W. C.]

SUCCESSFUL DESENSITIZATION AND TREATMENT OF POISON IVY AND POISON OAK POISONING

BIVINGS, F. L. (Arch. Derm. and Syph., Vol. 9, No. 5, May, 1924), reports his results in the treatment of a little over 100 cases of ivy poisoning, in boys and girls, using Strickler's technique of one to five injections of *Rhus toxicodendron* hypodermically, varying from 5 to 15 minims, and the tincture by mouth, varying from 15 to 30 minims, three times a day. The majority of the cases obtained relief by the end of 26 hours, and only one needed five injections. One case, which turned out not to be ivy poisoning, failed to respond, and one case of ivy poisoning was unaccountably resistant. Attempts at desensitization were almost universally successful, using four daily injections of 5 minims of the antigen with 15 drops of the tincture the first two days, and 20 drops the third and fourth.

[A. W. C.]

ACUTE BORACIC ACID POISONING

BAZIN, A. T. (Canad. M. A. J., 14:419, May, 1924), reports a case of a boy who had been given enemas consisting of six teaspoonfuls of boric acid, in six cups of water. Soon vomiting occurred, and on the second day a rash appeared, which was bright red and diffused generally over the surface, more marked on the trunk, front and back. For three days the enemas were discontinued, the vomiting ceased and

the rash disappeared, though the patient was very ill. Two more enemas were given, and the vomiting and rash returned. There was high fever and abdominal pain; the patient was very dull and stuporous. Two days later the temperature reached 105 degrees and the patient died. A careful study failed to lead to any diagnosis other than boric acid poisoning.

[A. W. C.]

PROGRESSIVE LENTICULAR DEGENERATION (HEPATO-LENTICULAR DEGENERATION)

GREENFIELD, POYNTON and WALSH (Quarterly Journal of Medicine, July, 1924) report an unusual example of this rare disease, first described by Wilson in 1912. The condition is important as illustrating the functions of the striate body, and unique in the constant association of hepatic cirrhosis with a cerebral lesion. It is a fatal malady, characterized by rigidity and tremor similar to those of paralysis agitans, with defects of articulation and deglutition, and sometimes spasmodic laughing and weeping. It occurs in young people, sometimes in more than one of a family. The average duration is one to three years. The hepatic cirrhosis is latent, ascites and other signs being lacking. The post-mortem examination shows constantly a bilateral degeneration of the lenticular and caudate nuclei, and occasionally changes in the cortex and brain-stem. Hepatic cirrhosis of the multilobular variety has been present in all the reported cases.

The unusual features of the present case were the absence of tremor until a late stage, and the presence of a greenish pigmentation of the cornea at its periphery, which has been reported in a few other cases. The authors object to the German term of pseudo-sclerosis as applied to this condition, on the ground that it is misleading and unnecessary.

[W. T.]

AURICULAR FIBRILLATION IN HYPERTHYROIDISM

DUNHILL, FRASER and STOTT (Quarterly Journal of Medicine, July, 1924) discuss the relationship of auricular fibrillation to thyro-toxic states, and report illustrative cases. It is now appreciated that this form of arrhythmia is quite common in hyperthyroidism; usually it is stable, less often transient in character. The authors report 15 cases, of which four were transient. In three of these the arrhythmia set in immediately after operation on the thyroid and lasted only a few days.

Persistent fibrillation occurred in 11 patients. In three of these it ceased spontaneously within three months after thyroidectomy, although it had been present for periods varying up to six years. In three others the return to a stable normal rhythm was brought about by the administration of quinidine, although this drug had proved ineffective before operation. In one case sudden death occurred after quinidine; the presence of heart block in this woman should have served as a contraindication. In two cases quinidine was used without operative treatment, in one successfully, in the other transient attacks of fibrillation recur, and operation will probably be necessary later.

These cases illustrate the causal relation of hyperthyroidism to fibrillation in cases where the two conditions are associated, the happy effect of thyroidectomy in some cases, and the necessity for quinidine in addition in others.

[W. T.]

CARBOHYDRATE-FAT RATIOS

ALLEN and WISHART (Jour. Metabolic Research, 4:1, July-August, 1923, p. 223) report data to suggest that ketosis is not determined solely by the ratio between carbohydrate and fat combustion.

[H. G.]

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MISS CRABTREE'S WILL

New impetus has apparently been given to the antivivisectionist movement by the bequest of Miss Lotta Crabtree. From an estate of some two million dollars, three hundred thousand dollars is set aside to "protect dumb animals from the cruelties of vivisection." Although we must admire the generous spirit which prompted such a bequest, we would feel nothing but regret if this sum were to be used to hinder the advance of science.

If the interest on \$300,000, or \$18,000 a year, must be spent annually in promoting legislation directed against vivisection, a commensurate amount of time will have to be given by busy scientists to combatting these measures. The antivivisectionists have thus far been unable to get through the legislature of this state laws which will cripple the laboratories in their efforts to alleviate the physical ills of man and beast, and it is to be hoped that they never will succeed in doing so. If this hope is fulfilled, the money left by Miss Crabtree will be wasted, except as it supplies employment to lawyers and lobbyists; if, on the other hand, the money accomplishes to any important degree the end for which it was left, it will be worse than wasted.

There is no need to review here the arguments

for and against vivisection. Everyone, except those few sentimentally unbalanced persons who are unable to see the logical conclusions of their emotions, admits that the present organization of the world demands the subordination of animal to human welfare. If this were not so, we would be pushed off the globe by the depredations of the carnivores and the consumption of our food supplies by the herbivores.

Despite the propaganda of the antis, the members of the medical profession are neither cruel nor cold blooded. We have yet to meet a man devoted to research who causes needless suffering, or who derives any pleasure from such suffering as cannot be avoided. Whenever animals have to be used for experimental purposes, they are handled in the most humane manner possible. As a matter of fact, a very large part of all that goes under the name of vivisection is carried on with the animal completely anesthetized. The laboratories in which this work is being done are connected with medical schools and hospitals, and their activities are supervised by the responsible officers of those institutions.

We trust that, if the terms of the will are as stated above, the executors will find a way of spending the money in some direction other than against a method so essential as animal experimentation. Strictly speaking, there are no "cruelties of vivisection," for cruelty, according to Webster's dictionary, consists of "a disposition to give unnecessary pain or distress to others." The intent to cause suffering needlessly is implied, and this intention is certainly not present in modern research. If it were, the medical profession would cast out the offender without any help from extraneous sources.

It would appear, therefore, as if Miss Crabtree had left this money to fight an evil which does not exist. We hope the bequest will not be frittered away in tilts at windmills, but will be applied constructively to confer a benefit upon the animal world. If such is done, we believe that the humane desire of the testatrix would be more adequately carried out.

THE SCIENTIFIC SESSION OF THE ANNUAL MEETING

For some time there has been complaint that the annual meetings of the Massachusetts Medical Society have been dominated by the Sections, now numbering six. The general practitioner may be present at several of the meetings of the Sections but is prevented from attending them all by reason of conflicts made necessary by the limited time devoted to the scientific session. Several prominent Fellows pointed out that of late the meeting of the Society itself had become a perfunctory occasion. At the last meeting one Section had not finished its meeting in the hall assigned for the assembling of the Society and the Society was forced to hold an impromptu meeting in another hall recently vacated by

another Section. One suggestion was received by the standing committee on Publications and Scientific Papers, a committee which, under the by-laws, for many years has made the program of the Society itself, that the parent society should hold several general meetings. The committee perfected the following plan which was approved by the Council at the stated meeting on October first, with the object of trying for one year, 1925, the effect of a limited number of papers of interest to all practitioners, read by men noted for their ability, before the Society itself, the Sections contributing one or more papers each:

"There will be four general meetings of the Society; each chairman of the six existing Sections is asked to submit to the Committee on Publications and Scientific Papers one paper from his Section which he considers most fitting to be read; the Committee on Publications and Scientific Papers will select five other papers to be read before the Society; these eleven papers, together with the Annual Discourse, will constitute the scientific session. Also, Fellows are allowed to submit other papers, the titles of which will appear on the official program, the papers themselves to be read at the discretion of the presiding officer, if time permits. It is understood that the officers of the Sections will be in charge of the meetings while their papers are being read and that the President of the Society will preside during the reading of the five papers furnished by the committee."

THE FIFTH ESTATE

The above is the title of an address delivered by Dr. Arthur D. Little in connection with the centenary celebration of the founding of the Franklin Institute and the inauguration exercises of the Bartol Research Foundation on September 19, 1924, and printed in *Science* on October 3.

When Franklin was in England the British Parliament was composed of representatives of three estates: the lords spiritual, the lords temporal and the commons, "but Edmund Burke, pointing to the Reporters' Gallery, said, 'There sits a Fourth Estate, more important far than they all.'" Benjamin Franklin, however, exemplified a Fifth Estate, composed, in the words of the author, "of those having the simplicity to wonder, the ability to question, the power to generalize, the capacity to apply. It is, in short, the company of thinkers, workers, expounders and practitioners upon which the world is absolutely dependent for the preservation and advancement of that organized knowledge which we call Science."

The world is ready to learn what the Fifth Estate has discovered; it is ready to apply what the Fifth Estate has taught. They give; mankind receives. They think; mankind acts. They form the barrier between civilization and barbarism, for who would deny that it is a small

group of intellectual workers, applying the knowledge of the past to the needs of the present, making the discoveries of today for the benefit of tomorrow, that preserves civilization for the world?

Man in the mass has changed but little since his emergence from the mists that first enveloped him. He wears clothes that he knows not how to weave; he uses steel that he knows not how to forge; he reads from books that he knows not how to print nor how to write. His instincts are the same; he kills, destroys and despoils save when held in check by that veneer of civilization which the Fifth Estate has wrought for him and preserves for him, for, as Stanley Hall said, "man has not yet demonstrated that he can remain permanently civilized."

The Fifth Estate is that small minority of intellectual minds that upholds the majority without ruling it. It cannot perpetuate that majority but it can persist with it. In Russia it has been exterminated, and the world has yet to see why but it can perish with it. In Russia its material rewards are small but its spiritual rewards are great, consisting in the satisfaction of services performed, of problems solved, of questions answered; of knowing that the greatest effort has been put forth and that the greatest return has been yielded.

Politically powerless as it is, our future is in the hands of that devoted band of scientists, the Fifth Estate. Without it we are as powerless as a body without a brain. The professional world in which we, as physicians, live is small, but we know how it would crumble without our quota of the Fifth Estate. The majority of us are not scientists; we cannot enter into that Estate, but we are aware of its necessity and that without it our works would fail.

SCHOOL FOR SUPERVISED STUDY

On October 6 the Boston Young Men's Christian Union at 48 Boylston Street opened a School for Supervised Study to employed men who have the ambition and ability to continue their education.

The need of guidance in learning by many men and women was first brought to the attention of Charles A. Gates, director of the Prospect Union Educational Exchange of Cambridge, who conceived the idea of a school for those individuals where study under individual supervision could be made. The plan was presented to Frank G. Locke, President of the Boston Young Men's Christian Union, and a committee was appointed to consider the project. As a result of the recommendation of this committee the school has been opened to give instruction in elementary and secondary school subjects and to prepare for college entrance examinations. The school will be open from 12:30 P. M. to 3:30 P. M. and from 5:30 P. M. to 10:30 P. M. with a tuition fee of three dollars a week. Each student will be allowed at

least two hours of individual instruction during the week.

Those whose natures crave learning generally obtain it, but never before has this road been made so easy. The insatiable curiosity of the enquiring man demands some measure of satisfaction; some torch to guide it, whether from a modern seat of learning or by the burning pine knot of Abraham Lincoln. The intellectual inertia must be overcome, however; the mental effort must be made, mindful of the warning of the ancient instructor that there is no royal road to geometry. Those who have the desire to learn, let them be taught, for who knows when the pupil may not become the master?

A STEP BACKWARDS

AFTER 16 years in practice the examination of public school pupils in Chicago, save for a passing search for contagious diseases, has been discontinued following a ruling by school board attorneys that baring a child's chest constituted a "stripped examination," according to a news-paper report.

It seems inconceivable, in view of the advances that have been made in promoting public health, in awakening an interest in child hygiene and child nutrition, in emphasizing the need of periodic health examinations and in attempting to acquaint the lay public with matters of health and disease that closely affect their personal welfare, that the authorities in a civilized municipality could take such a long step backward.

Such startling facts as this Chicago ruling, the strength of the anti-vivisectionists in certain states, the activities of the anti-vaccinationists and the rise of an Abrams cult cause us to pause and wonder if one of our most common mistakes is not that of overrating the intelligence of our fellow beings.

EASY MARKS

THE notice in the JOURNAL calling attention to the efforts of a young man to induce physicians to pay him for subscriptions to this JOURNAL has brought out information that several doctors have been victimized.

The argument used was that this solicitor wanted to secure funds for an education. Although some of the doctors knew that the annual dues covered subscriptions to the JOURNAL, out of the proverbial kindness of a doctor's heart, the money was paid.

Checks given to this person were cashed in a nearby drug-store. None of the money has been turned in to the JOURNAL.

No person should pay a solicitor for subscriptions to the JOURNAL unless proper credentials are presented. No member of the Massachusetts Medical Society should pay annual dues

except to his district treasurer. No other payment for the JOURNAL is required of members of the Society.

If this boy appears call in the police!

CORRESPONDENCE

AN ENEMY OF THE PEOPLE

Meriden, N. H., 28th of Sept., 1924.

Mr. Editor:

The enclosed, copied from a clipping from a recent Glasgow paper, will interest you I know.

You will remember that Dr. Walter R. Hadwen is the president of the British Union for the Abolition of Vivisection, and that twice within the past five years he has been imported by the American Antis to help the cause over here.

Very sincerely yours,

ERNEST HAROLD BAYNES.

(Report Published in the Sunday Post (Glasgow, Scotland), September 14, 1924)

GRAVE CHARGE AGAINST WELL-KNOWN DOCTOR
REVELATIONS AT INQUEST ON CHILD WHO DIED FROM
DIPHTHERIA

MODERN GERM THEORY "ALL ROSH"

Gloucester, Saturday.

The sensational verdict at the inquest held at Gloucester in connection with the death of Nellie Christabel Burnham, aged 10, had a sequel today, when Dr. Walter Hadwen, the well-known anti-vaccinationist, was charged at Gloucester Police Station with the manslaughter of the girl.

At the coroner's inquiry the jury returned a verdict of death from diphtheria and pneumonia, adding that Dr. Hadwen failed to show competent skill and sufficient attention in the treatment of the child, in consequence of which failure death ensued.

Inspector James asked for a remand to enable him to communicate with the Director of Public Prosecutions and the Chief Constable. The doctor made no reply to the charge. He was remanded till Friday on bail.

The evidence at the inquest was to the effect that the child, when attended by Dr. Hadwen, was treated for tonsillitis, and the parents, not being satisfied, called in Dr. Ellis, who diagnosed diphtheria and pneumonia, the child dying the next day. The inquest lasted eight hours.

At the conclusion of the inquest proceedings, Dr. Hadwen was committed for trial on the coroner's warrant and was arrested, but released on bail.

THE MOTHER'S STORY

The mother, telling her story, stated that on August 1 she called Dr. Hadwen in to treat the child, who had a bad throat and talked thickly. The doctor, she added, ordered a gargle of warm water and vinegar, and also gave the child some medicine.

On August 4 the child was worse, but the doctor looked down her throat and advised that it should be painted with pure glycerine. The child was much worse on August 9, but after Dr. Hadwen had looked at her throat, felt her pulse, and examined her chest, he said there was scarcely anything the matter with her and that she would soon be all right.

"The same day," the mother added, "I called in Dr. Ellis, who said the child was suffering from diphtheria and pneumonia, and told me there was little hope of her living. The child died the following day."

Dr. Ellis said that when he was called to the child he found her seriously ill with diphtheria. Her temperature was 102.5 as against 98.4 normal, and her

pulse 154 as against 70 normal. The whole of the throat was filled with membrane. He did not expect her to live. He did not think it possible that the advanced growth of diphtheritic membrane could not have been seen on the morning of August 9.

The treatment advised by Dr. Hadwen was of but slight value. He thought accurate diagnosis and proper treatment would have saved the child's life.

CHILD GOT OUT OF BED

Mrs. Burnham stated in reply to Mr. Clements, counsel for Dr. Hadwen, that while she was out the child got out of bed and went downstairs for water. She did not mention this to Dr. Hadwen. Two of her children are now in hospital with diphtheria.

Dr. Ellis, who was recalled, stated that he did not think the incident of walking downstairs necessarily prejudiced the child's chances of recovery. He agreed that it was possible for an experienced medical man to make a mistake about diphtheritic membrane.

Dr. Hadwen, who holds the qualifications of M.D., M.R.C.S., L.R.C.P., stated in evidence that when he was called to the child she had a bad cold and watery discharge from the nose. He examined her to see if diphtheria was present, but there were no symptoms of that disease. He prescribed an expectorant mixture, because she had bronchial catarrh, with a suspicion of bronchial pneumonia. He declared that a statement by the mother that he was never in the house more than five minutes was incorrect.

"The child's condition gave me no anxiety," he added, "and on August 6, with the exception of weakness, she was practically well. There were no clinical symptoms of diphtheria from first to last."

GERM THEORY "ALL BOSH"

"On the Saturday the child died I was taken aback by her condition, and tried to get at the reasons for the relapse, but I did not take a swab of the child's throat, because I consider the whole modern germ theory to be all bosh."

The coroner said that the jury had to decide whether the child died from diphtheria, whether there was no neglect, and if so, whether there was gross neglect.

The jury found that the child died from diphtheria, and that Dr. Hadwen failed to show competent skill, and that such failure caused the child's death.

The coroner said that in law this was a verdict of manslaughter. He committed Dr. Hadwen for trial at Gloucester Assizes.

Editor's Note:—Mr. Baynes is Field Secretary of the Friends of Medical Progress, Inc. Comment would be superfluous.

ARGUMENT IN FAVOR OF IMPARTING INFORMATION TO MEMBERS OF THE LEGISLATURE

Mr. Editor:

As one of the persons of *average intelligence* to whom you have abandoned the vaccination controversy, may I be allowed a minimum of space to answer Mr. Nunn's last letter?

Because but 108 persons out of 26,920 died, the sufferings of these 26,920 were, says this gentleman, evidently not severe.

Ye gods! 26,920 cases of severe toothache result in but few deaths, but 26,920 people would rise up and tell Mr. Nunn what they thought of this statement if applied to them.

Why am I to neglect smallpox because there are more cases of measles, diphtheria, etc., when I know that were it not for vaccination smallpox would again, as it once did, far outstrip these diseases in frequency?

Would that we could strike measles and diphtheria from the list of common diseases as we can smallpox, but what intelligent person will argue that because as yet we cannot do the one (though we are making great progress) we should not do the other? One cannot eliminate the ocean, but by proper measures one can keep a portion of it out of one's front yard.

The Medical Liberty League and Mr. Nunn are actively engaged throughout the State in the usual attempt to influence candidates for the Legislature against our present school vaccination laws. Examination of the rural press will substantiate this statement.

Members of the Massachusetts Medical Society can do good work by impressing upon candidates for both Senate and House the importance of keeping up the bars which are largely responsible for the contrast between Massachusetts with 457 cases of smallpox in eleven years and Michigan with 26,972, Massachusetts having 200,000 more inhabitants than the Middle Western State.

SAMUEL B. WOODWARD.

A QUESTION OF LEGAL PROCEDURE

September 26, 1924.

Editor, Boston Medical and Surgical Journal:

The enclosed clipping is taken from the *Boston Traveler*, September 25, 1924. It might be interesting to the medical profession to know that the federal laws differ in different States. I should like to know the decision in this case.

R. WETHERBEE.

Belmont, Mass.

PINT PURCHASED ON PRESCRIPTION LOST TO MALDEN MAN

"If a man buys a pint of liquor on a physician's prescription in Boston, can it be legally taken away from him in New York?"

"A judicial opinion on this moot question is to be sought by Albert M. Hall, prominent business man of Malden, who suffered the loss of the liquor."

"This particular pint was especially prized because it had been his companion on a 4000-mile journey from Boston to the Barbadoes and back."

"When he landed at New York on his return the customs officers took it away from him, saying it was legal for him to have it in Boston, but not in New York, as he had no permit to transport it."

"Hall has engaged a lawyer and will settle the matter in the courts."

AMERICAN MEDICAL ASSOCIATION

COUNCIL ON PHARMACY AND CHEMISTRY

Mr. Editor:

In addition to the articles enumerated in our letter of August 29 the following have been accepted:

Abbott Laboratories—

Metaphen:

Metaphen Solution 1:5,000

Swan-Myers Company—

Sterile Ampules of Mercury Benzolate, 2 per cent.

Sterile Ampules of Mercury Biiodide (Oil Solu-

tion)

Sterile Ampules of Mercury Salicylate, 0.097 gm.

(1 1/2 gr.)

Sterile Ampules of Mercury Salicylate, 0.065 gm.

(1 gr.)

Sterile Ampules of Mercury Succinimide, 0.01

gm. (1/6 gr.)

Yours truly,

W. A. PUCKNER, *Secretary*,
Council on Pharmacy and Chemistry.

MISCELLANY

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

DISEASES REPORTED FOR THE WEEK ENDING OCTOBER 11, 1924

Disease	No. of Cases	Disease	No. of Cases
Anterior poliomyelitis	16	Measles	50
		Mumps	32
Anthrax	1	Ophthalmia neonato-	
Chickenpox	48	rum	22
Diphtheria	115	Pellagra	1
Dog-bite requiring anti-rabic treatment	4	Pneumonia, lobar	60
		Scarlet fever	139
		Septic sore throat	4
Dysentery	3	Syphilis	38
Encephalitis lethargica	3	Tetanus	1
Epidemic cerebrospinal meningitis	3	Suppurative conjunctivitis	21
German measles	1	Trichinosis	1
Gonorrhea	114	Tuberculosis, pulmo-	
Hookworm	1	nary	124
Influenza	7	Tuberculosis, other	
Malaria	2	forms	14
		Typhoid	15
		Whooping cough	32

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH

RESUME OF COMMUNICABLE DISEASES

SEPTEMBER, 1924

GENERAL PREVALENCE

The diseases showing an increase over the previous month were anterior poliomyelitis, chickenpox, pneumonia (lobar), scarlet fever and typhoid fever.

	Sept.	Aug.	Sept.
	1924	1924	1923
Anterior poliomyelitis	88	39	38
Chickenpox	66	59	137
Pneumonia, lobar	103	89	110
Scarlet fever	367	237	312
Typhoid fever	81	64	97

RARE DISEASES

Anterior poliomyelitis was reported from Attleboro, 1; Boston, 17; Brookline, 2; Cambridge, 4; Concord, 1; Everett, 2; Fall River, 16; Fitchburg, 1; Framingham, 1; Franklin, 2; Haverhill, 2; Leominster, 1; Lowell, 4; Lynn, 2; Malden, 1; Manchester, 1; Marblehead, 2; Medford, 2; Millbury, 1; New Bedford, 1; Newton, 2; Peppell, 1; Quincy, 1; Revere, 1; Salem, 1; Somerville, 2; Springfield, 1; Stoughton, 1; Swampscott, 2; Watertown, 2; Wrentham, 1; Westport, 1; Winchester, 1; Winthrop, 1; Worcester, 5; total, 88.

Dog-bite requiring anti-rabic treatment was reported from Boston, 17; Cambridge, 3; Fall River, 1; Holliston, 1; Hudson, 2; Lawrence, 2; Lowell, 10; Winchester, 1; Worcester, 1; total, 38.

Dysentery was reported from Boston, 2; Brookline, 1; Everett, 1; Newburyport, 2; total, 6.

Encephalitis lethargica was reported from Boston, 5; Malden, 2; Marblehead, 1; total, 8.

Epidemic cerebrospinal meningitis was reported from Attleboro, 1; Barnstable, 1; Boston, 3; East Bridgewater, 1; Everett, 1; Fall River, 1; Lancaster, 1; Lawrence, 2; Maynard, 1; Montague, 1; North Andover, 1; Quincy, 1; Springfield, 1; Watertown, 1; total, 17.

Hookworm was reported from Boston, 1.

Malaria was reported from Boston, 1.

Septic sore throat was reported from Boston, 5; Braintree, 1; Milton, 1; total, 7.

Tetanus was reported from Adams, 1; Boston, 2; Leominster, 1; total, 4.

Trachoma was reported from Boston, 3; Lynn, 1; total, 4.

DISTRIBUTION

All Communicable Diseases

	Sept., 1924	Sept., 1923
Total cases (all causes)	2,902	3,207
Case rate per 100,000 population	72.5	80.8

Certain Prevalent Diseases

	Sept., 1924	Sept., 1923
Diphtheria:		
Total cases	318	605
Case rate per 100,000 population	7.9	15.2

Cities and towns noticeably exceeding their median endemic indexes*:

	Chelsea (3)	Malden (4)	10
Measles:			

	Sept., 1924	Sept., 1923
Total cases	143	157
Case rate per 100,000 population	3.6	3.9

Cities and towns noticeably exceeding their median endemic indexes*:

	North Andover (0)	Wilmington (0)	24
Scarlet Fever:			

	Beverly (3)	Springfield (10)	16
Total cases			
Case rate per 100,000 population	9.2	7.9	

Cities and towns noticeably exceeding their median endemic indexes*:

	Beverly (3)	Springfield (10)	16
Typhoid Fever:			

	Total cases <td>81</td> <td>97</td>	81	97
Case rate per 100,000 population	2.0	2.4	

Cities and towns noticeably exceeding their median endemic indexes*:

	Beverly (3)	Springfield (10)	16
Total cases			
Case rate per 100,000 population	5.5	8.6	

Cities and towns noticeably exceeding their median endemic indexes*:

	Fall River (16)	Stoneham (0)	6
Middleboro (6)	11	Lawrence (8)	15
Everett (3)	9	Holyoke (0)	8

Cities and towns noticeably exceeding their median endemic indexes*:

	Haverhill (5)	Stoneham (0)	6
Tuberculosis, Pulmonary:			

	1924	1923
Total cases	466	442
Case rate per 100,000 population	11.6	11.1

Cities and towns noticeably exceeding their median endemic indexes*:

	1924	1923
Total cases	74	58
Case rate per 100,000 population	1.8	1.5

*The Median Endemic Index is obtained by arranging in arithmetical sequence the monthly totals of reported cases for the past five years and selecting the middle figure. The numbers in parentheses after the name of each city and town indicate the Median Endemic Index for that city or town; the numbers without parentheses indicate the cases reported during the current month.

RHODE ISLAND STATE BOARD OF HEALTH
CONTAGIOUS DISEASES REPORTED FOR THE WEEK ENDING
SEPTEMBER 27, 1924

<i>Diphtheria</i>			<i>Scarlet Fever</i>	
Newport	4	Providence	2	
Pawtucket	5	Cumberland	1	
Providence	7	Scituate	1	
East Providence	1	South Kingstown	1	
Cumberland	1	Mumps		
		Charlestown	2	
<i>Typhoid Fever</i>		<i>Chickenpox</i>		
Pawtucket	1			
Providence	3	Smithfield	1	
		<i>Septic Sore Throat</i>	<i>Whooping Cough</i>	
Providence	1	Providence	1	

MAINE STATE DEPARTMENT OF HEALTH

WEEKLY REPORT OF INFECTIOUS DISEASES REPORTED
FOR THE WEEK ENDING OCTOBER 4, 1924

<i>Cerebrospinal Meningitis</i>			<i>Poliomyelitis</i>	
St. John Pl.	1	Auburn	1	
		Augusta	1	
		Bath	2	
<i>Chickenpox</i>	3	Franklin	2	
Madison	2	Harrington	1	
Mexico	2	Lisbon	1	
Portland	1	Madison	1	
Robbins	3	New Gloucester	1	
Starks				
	11		10	

<i>Diphtheria</i>			<i>Scarlet Fever</i>	
Auburn	1	Auburn	1	
Brunswick	1	Augusta	1	
Mexico	1	Bingham	2	
Parkman	1	Machias	1	
Rumford	2	Milford	1	
Westbrook	1	Old Town	4	
	7	Orono	2	
		Perham	1	
		Portland	1	
Bath	2	Wilton	1	
Rumford	1			
Sanford	2			
Stockholm	1			
South Portland	1	<i>Septic Sore Throat</i>		
Westbrook	1	Turner	2	
		<i>Tuberculosis</i>		
	8	Bangor	3	
		*Fort Kent	1	
<i>Measles</i>	1	*Hallowell	1	
Auburn	1	*Pittsfield	1	
Augusta	1	*Searsport	1	
Lewiston	1	Skowhegan	1	
	3	Waterville	1	
			9	

<i>Mumps</i>				
Hope	1			
Portland	16	<i>Gonorrhoea</i>	2	
Randolph	1	Fairfield	5	
		Greenville	6	
	18	Hallowell	1	
		Houlton	1	
		Monroe	1	
Lewiston	1	Sanford	1	
Turner	1	Sherman	1	
	2		17	
		<i>Whooping Cough</i>		
Portland	1	Presque Isle	13	

*Cases reported by Sanatoriums.

MAINE DEPARTMENT OF HEALTH
REPORT OF INFECTIOUS DISEASES REPORTED FOR THE
WEEK ENDING OCTOBER 11, 1924

<i>Chickenpox</i>			<i>Franklin</i>	1
Brunswick	4	Islesboro	1	
Ellsworth	1	Southport	1	
East Millinocket	1	Rockland	2	
Lewiston	2			
New Portland	2			
Robbins	1			
Waterville	1			
	2			
		<i>Scarlet Fever</i>		
	13			
<i>Diphtheria</i>				
Alna	1			
Ellsworth	1			
Lewiston	1			
Mexico	2			
Newcastle	1			
Portland	1			
	1			
		<i>Gonorrhoea</i>		
Auburn	1	Passadumkeag	1	
Davidson	1	<i>Syphilis</i>		
Farmington	1			
Fort Fairfield	1			
Houlton	1			
Perry	1			
Robbins	2			
Rumford	1			
Sherman Mills	1			
South Paris	1			
	1			
		<i>Tuberculosis</i>		
Auburn	1	Auburn	1	
	1	Bath	2	
		Caribou	3	
	11	Great Pond	1	
		Houlton	1	
		Jackman Pl.	2	
		Portland	3	
		Old Town	1	
		Waterville	1	
		Westbrook	3	
		Turner	1	
	1			
		<i>Vincent's Angina</i>		
	7	Millinocket	1	
		<i>Whooping Cough</i>		
Bath	1	Eustis	1	
Bluehill	1	Medway	8	
Brownfield	1			
Carroll	2			
Farmington	1			
	1			
<i>Pneumonia</i>				
Bath	2			
East Millinocket	1			
New Portland	1			
Portland	1			
South Portland	1			
	1			
		<i>Poliomyelitis</i>		
Bath	1			
	1			
		<i>Septic Sore Throat</i>		
	15			
		<i>Tuberculosis</i>		
	1	Bath	2	
	5	Caribou	3	
	6	Great Pond	1	
	2	Houlton	1	
	1	Jackman Pl.	2	
	1	Portland	3	
	1	Old Town	1	
	1	Waterville	1	
	1	Westbrook	3	
	1	Turner	1	
	1			
<i>Connecticut Department of Health</i>				
<i>Weekly Morbidity Report for the Week Ending</i>				
<i>OCTOBER 4, 1924</i>				
(Including all cases reported before 11 A. M., Monday, October 6, 1924)				
<i>Diphtheria</i>				
Fairfield County		New Britain	2	
Bridgeport	2	Derby	2	
Stamford (T)	3	Madison	1	
Stratford	1	New Haven	1	
Hartford County		Waterbury	2	
Bristol	1	New London County	1	
Enfield	2	North Stonington	1	
Hartford	4	Norwich (T)	1	

Stonington	1	State total	1
Windham County		Last week	6
Thompson	1		
		Whooping Cough	
State total	27	Fairfield County	1
Last week	41	Greenwich	5
The following diphtheria bacilli carriers were reported:		Stratford	1
Greenwich	1	New Haven County	5
New Britain	1	New Haven	1
New Haven	3	North Haven	1
Stratford	12	Oxford	1
		Waterbury	2
		West Haven	2
		New London County	2
		New London	—
Scarlet Fever			
Fairfield County		State total	19
Bridgeport	2	Last week	32
Greenwich	6		
Shelton	2	Typhoid Fever	
Hartford County (C)	1	Fairfield County	1
Bristol	1	Bridgeport	1
New Britain	5	Stamford (C)	1
Litchfield County		Stamford (T)	1
Thomaston	4	Hartford County	1
Middlesex County		New Britain	1
Durham	3	New Haven County	1
New Haven County	1	Hamden	1
East Haven	1	New Haven	1
New Haven	4	Preston	1
Waterbury	1		—
New London County		State total	7
Norwich (C)	1	Last week	10
Waterford	1		
Tolland County		Other Communicable Diseases	
Columbia	1	Cerebral spinal men.	1
Rockville	1	Chickenpox	10
Windham County	1	Encephalitis epid.	1
Putnam (C)	1	German measles	4
Woodstock	—	Mumps	12
State total	36	Pneumonia (lobar)	14
Last week	24	Poliomyelitis	6
Measles		Tetanus	1
New London County		Tuberculosis (pul.)	32
New London	1	" (other forms)	3
		Gonorrhea	16
		Syphilis	18

Mumps is epidemic in Village and Plainfield.

A JOINT MEETING OF ESSEX NORTH AND SOUTH, MIDDLESEX NORTH AND EAST DISTRICT MEDICAL SOCIETIES

THIS meeting was held at Danvers State Hospital, Oct. 8, 1924, at one o'clock P. M., Dr. J. A. Bédard, President of Essex South, in the chair.

A ward visit and inspection of the hospital occupied the hour from one to two o'clock. Dr. Bigelow, the President of the parent society, spoke of the need of the Massachusetts Medical Society of a permanent home and his hope of its realization in the near future. He referred also to some complaints of alleged pernicious activity of certain public health nurses in some parts of the state but seemed inclined to minimize their importance.

Dr. O'Brien, Secretary of the Joint Standing Committee on State and National Legislation, spoke of the hearings being held by the special Joint Committee of the Legislature, particularly with reference to the bill providing

for abolition of curtailment of the Governor in his choice of appointees upon the Board of Registration in Medicine, and also the bill which proposes to establish a separate board for the registration of chiropractors.

Dr. Lyman A. Jones, District Health Officer for the Commonwealth, elucidated the plan for operation of the State's program for Tuberculosis Prevention.

Dr. Painter, Chairman of the Committee on Medical Education, advocated the establishment of a similar committee by each District Society which should act in an advisory capacity to the Medical Schools with respect to curricula.

Dr. Mellus of Newton informed and entertained the meeting with an account of campaigning for the Legislature.

Dr. Small, President of Middlesex East, spoke concerning cooperation of the members with the Committee on State and National Legislation.

Dr. Kline, State Commissioner of Mental Diseases, spoke in opposition to the bill now pending, providing for the registration of Nursing Attendants and providing for a salaried Director of Nursing Education, on the ground that it tended to lower the standing of nursing efficiency in the State and threatened to extend paternalism to the control of the occupation of nursing.

The scientific session consisted of the presentation of the subject of Dementia Praecox with illustrative cases by Dr. Charles L. Clay, Senior Physician at Danvers State Hospital, and the presentation of the subject of Manic Depressive Insanity by Dr. Guy C. Randall, Senior Physician at Danvers State Hospital. Dr. McDonald, Superintendent of Danvers State Hospital, discussed the various functions of the hospital in its service to the community. Lunch was served at the conclusion of the meeting. Attendance 115. Adjourned 5 P. M.

Wm. T. HOPKINS, *Reporter.*

MASSACHUSETTS GENERAL HOSPITAL HOUSE PUPILS ALUMNI ASSOCIATION

THE annual dinner of the Massachusetts General Hospital House Pupils Alumni Association was held October 16, at the Harvard Club of Boston. About 66 members were present. In the unavoidable absence of Dr. Seudder, the president, the vice-president, Dr. Henry Jackson, presided as chairman and toastmaster.

The following were elected to serve as officers for the coming year:

President—Dr. Homer Gage of Worcester.

Vice-Presidents—Dr. A. H. Hodgdon, Dr. H. C. Moffitt and Dr. J. C. Hubbard.

Dr. C. E. Welles was reelected secretary and treasurer.

After a brief business meeting there followed a very interesting program dealing with

various aspects of industrial medicine and surgery. Dr. David Edsall, Dean of Harvard Medical School and School of Public Health, spoke on the subject of industrial medicine and its relations to medical progress. He called attention to the opportunities of the hospital to do research work in the problems connected with industrial hazards. In this connection he spoke of the work of Minot, Aub and Drinker along these lines.

Dr. W. Irving Clark of Worcester, surgeon to the Norton Industries, spoke upon some of the problems of industrial surgery. This he considered the root from which industrial medicine had sprung. Industrial surgery was given great impetus by the Workmen's Compensation Act. To illustrate some of the problems of industrial surgery, he spoke of the importance of treatment of minor injuries and stated that of 1920 wounds sustained during the past year in the industries under his supervision there were only nine cases of infection. He spoke also of the orthopedic conditions arising from industrial strains and asked for a better co-operation between the hospital surgeon treating industrial cases and the industrial surgeon.

Dr. Hans Zinsser, Professor of Bacteriology at Harvard Medical School, spoke of the opportunities offered the epidemiologist to study the origin and course of epidemics in large industrial plants. He spoke also of the relation of the trained bacteriologist to the hospital staff. Too often, he said, the position of bacteriologist in a hospital is used simply as a stepping-stone to other positions; the bacteriologist should be one interested primarily in bacteriology, paid enough to enable him to devote his time to that branch; he should be a consultant rather than a routine technician.

Dr. Conrad Wesselhoeft delighted his audience by a few remarks which do not lend themselves readily to abstract.

Dr. Frederic C. Irving read an original poem which was received with much enthusiasm.

Dr. Frederic A. Washburn spoke briefly about the future growth of the Massachusetts General Hospital. He said that the new medical wards and laboratories were nearing completion; that the next step in advance would be the building of a ward for pay patients of moderate means, financial support for this building being already in sight.

HISTORY OF THE MASSACHUSETTS MEDICAL SOCIETY, 1781-1922

THIS handsome volume of 505 pages and 41 illustrations has been written by the Secretary of the Society and published by the Plimpton Press of Norwood. It is an absorbing story, besides containing short biographies and pictures of the founders and those chiefly concerned in carrying on the old society. It should have

a place in the library of everyone who is interested in the history of medicine.

In order to pay the cost of publishing 250 additional copies of the limited edition must be sold at once. They may be obtained of the assistant librarian, Mr. James F. Ballard, at the Boston Medical Library, 8 The Fenway, Boston, who will mail one on receipt of a check, made out to him, for six dollars, the cost of publishing.

NEWS ITEMS

DR. WINFRED OVERHOLSER has been appointed to the position of assistant to Dr. Kline, Commissioner of Mental Diseases.

Dr. Overholser has been assistant superintendent of the Medfield State Hospital, on the staff of the Westboro State Hospital, and assistant superintendent of the Gardner State Colony.

THE WACHUSSETT MEDICAL IMPROVEMENT SOCIETY

THIS society held its meeting at Holden Hospital on the evening of October 8.

An unusually satisfactory banquet was served by the nursing staff, after which the meeting was called to order by the President, Dr. F. H. Washburn. The usual routine business was transacted and interesting cases reported by several members.

Dr. Leslie P. Leland, Dr. Francis D. Hart and Dr. Louis A. Cottle were elected to membership.

The paper of the evening was by Dr. E. H. Trowbridge of the Worcester Board of Health. He presented in a most admirable manner the public health problem from all angles. Prevention of disease was the keynote of his talk. He predicted that with the Schick test and diphtheria toxin-antitoxin the disease diphtheria would be as rare as smallpox. He mentioned many other advances in preventive medicine.

The paper was freely discussed.

The next meeting of the society will be held at Holden Hospital on Wednesday evening, November 5, at 7.30.

The society will be favored by a paper by Dr. F. L. Storey of Holden, entitled "The Care and Treatment of Premature Infants"; also a paper by Dr. Arthur Kemberly of Worcester, entitled "Birth Injuries."

NOTES FROM THE WORCESTER DISTRICT

DR. THEODORE L. STORY and family of Holden are spending the month of October in Boston during which period Dr. Story is attending the Harvard Post-Graduate Pediatric Course.

The Holden Center grammar school building, which is to be replaced by a new structure, has been purchased by Dr. Washburn.

It is being moved to the corner of Boyden Road and Main Street where it will be remodeled into an office building for the Holden groups of physicians.

THE WONDERFUL NEWS

MASSACHUSETTS has a Silver Cup—a National Silver Cup—awarded to Essex County for the best Crusade record in counties over 100,000 population. The cup is a beauty; it stands 16½ inches high; the inscription says, "Awarded by the National Tuberculosis Association to the schools of Essex County, Mass. 1924-25."

How about working to keep the Cup in Massachusetts next year?

Seven National pennants came to Massachusetts—one to St. John's School, Cambridge; three to Wingate School, Haverhill; one to School Street School, Haverhill, and two to the West School, Peabody.

Our own Massachusetts Silver Cups—the Loring Cups—Have you heard who won them? Merrimac had to relinquish its hold on the cup this year for Worthington in Hampshire County had a still higher record—Merrimac holding second place. The Cup for larger communities has gone to Plymouth, the city of Haverhill standing in second place.

WESTERN RESERVE MEDICAL SCHOOL

DR. HARVEY CUSHING delivered the dedication address at the opening of the new school of medicine of Western Reserve University on October 9.—*Science*.

SPRINGFIELD ACADEMY OF MEDICINE

THE regular meeting of the Springfield Academy of Medicine was held at 137½ State Street, Tuesday evening, October 14th, at 8.30 o'clock.

Dr. Harvey W. Van Allen reported three interesting cases:

- (a) Hodgkin's disease.
- (b) Uterus didelphys.
- (3) Carcinoma in bone metastatic from unrecognized tumor in breast.

Dr. George Corcoran presented an interesting case.

Dr. Edgar Mayer of Saranac Lake, N. Y., read the paper of the evening, entitled: "Light treatment in tuberculosis," illustrated with lantern slides.

Discussion was opened by Dr. Parker M. Cort.

Dr. Mayer has had a number of years of experience in treating tuberculosis by heliotherapy at Saranac Lake and is one of the leading men in this special line of work. He is obtaining fascinating results with the various types of tuberculosis, such as pulmonary, bone and joint, abdominal, etc. The treatment is simple and may be carried out anywhere, not requiring a sanitorium for its use.

APPOINTMENTS AND REAPPOINTMENTS IN THE HARVARD MEDICAL SCHOOL

REAPPOINTMENTS for one year from September 1, 1924:

Russell Bailey Macfarlane, D. M. D., Assistant in Comparative Anatomy; Francis Winslow Palfrey, M. D., Instructor in Medicine; Frank Dennette Adams, M. D., Assistant in Medicine; Harry Philip Cahill, M. D., Instructor in Otology; Frederick Leon Bogan, M. D., Instructor in Otology; Philip Edward Meltzer, M. D., Instructor in Otology; Oliver Ames Lothrop, M. D., Instructor in Otology; Charles Tirrell Porter, M. D., Instructor in Otology; Fred Albert Simmons, M. D., Instructor in Otology; Harold Grant-Tobey, M. D., Instructor in Otology; Charles Orrin Day, M. D., Assistant in Otology; Harry Paul Finck, M. D., Assistant in Otology; Harold John Bean, Research Fellow in Preventive Medicine and Hygiene; Edward Deles Churchill, M. D., Instructor in Surgery; Fletcher Hatch Colby, M. D., Assistant in Genito-Urinary Surgery.

New appointments for one year from September 1, 1924.

Clyde Sidney Tarter, B. S., Student Assistant in Anatomy; Frederick Ronald Brown, M. D., Assistant in Medicine; Marcel Matton, Research Fellow in Medicine; Edouard Wilcox, Research Fellow in Medicine; William Lawrence McNamara, M. D., Assistant in Pathology; Donald Leslie Augustine, Sc.D., Instructor in Helminthology (Department of Comparative Pathology); Sidney William Britton, M. D., Research Fellow in Physiology; Homer William Smith, Sc. D., Research Fellow in Physiology; Grantley Walder Taylor, M. D., Alumni Assistant in Surgery.

RECENT DEATHS

DR. ANDREW J. HALPIN, of Lowell, died October 10, 1924, at the age of 60, after four days' illness caused by Coronary Thrombosis.

Dr. Halpin was a Fellow of the American Medical Association, the Massachusetts Medical Society and the American Urological Association, and a member of the Harvard Club of Boston.

He received his A. B. degree at McGill University in 1886 and graduated from Harvard Medical School in 1889. He was Past President of the Middlesex North District Medical Society.

DR. GEORGE HENRY CLARK, of Holyoke, died in the Holyoke Hospital, October 8, 1924, at the age of 56.

He was a graduate of the Long Island College Hospital in 1891, settled in Springfield and moved to Holyoke in 1893, joining the State Medical Society in that year. He served for a number of years as a member of the school board. He was a member of Shields court,

M. C. O. F., and was widely known in Foresters' circles throughout the state, serving frequently as delegate to state conventions. Besides his widow, he leaves two daughters and two brothers.

NOTICES

HARVARD MEDICAL SOCIETY

A MEETING of this Society will be held in the Amphitheatre of Building C, Harvard Medical School, Tuesday evening, October 28, at 8.15. Subject: The Problem of Treatment in Spastic Paralysis. Speakers, John I. Hunter and N. B. Royle, of Sidney, Australia.

THE NORFOLK DISTRICT MEDICAL SOCIETY

A STATED meeting of the Society will be held at the Boston Sanatorium, 249 River St., Mattapan, on Tuesday, October 28, 1924, at 3:30 P. M.

PROGRAM

3:30 to 4:30—Inspection of the Buildings.

Communications:

Tuberculosis Among Children. Presentation of Cases. Dr. F. H. Hunt, Chief Resident Medical Officer, Boston Sanatorium.

The Public Health Program—Administrative, Educational, Nutritional and Social. Dr. Sumner H. Remick, Director, Division of Tuberculosis (Sanatoria) of the Massachusetts Department of Public Health.

The Clinical Diagnosis of Juvenile Tuberculosis. Dr. Henry D. Chadwick, Superintendent Westfield State Sanatorium, Chief of Clinics, Division of Tuberculosis (Sanatoria) of the Massachusetts Department of Public Health.

The Part of the Medical Profession in the Juvenile Tuberculosis Program. Dr. Eugene R. Kelley, Massachusetts Commissioner of Public Health.

6:30—Collation.

The Censors meet November 6, 1924, 4 P. M. at the Roxbury Masonic Temple for the examination of candidates.

FRANK S. CRUICKSHANK, M. D., Secretary,
520 Beacon Street, Boston.

WORCESTER NORTH MEDICAL SOCIETY

A MEETING of the Worcester North District Medical Society will be held Tuesday, Oct. 28, 1924.

The program for this meeting is as follows:
Speaker:—Edwin T. Wyman, M. D. of Boston.
Subject:—To be announced later.

C. H. JENNINGS, Secy.

SOCIETY MEETINGS

Bristol South Medical Society

Next meeting will be held Thursday, November 16, 1924.

Essex North District Medical Society

January 7, 1925. Semi-annual meeting at Haverhill. May 6, 1925. Annual meeting at Lawrence.

Hampden District Medical Society

Meetings to be held on the third Tuesday of January and the third Tuesday in April.

Dr. William J. Mayo is expected to attend the combined meeting of the four western Districts to be held in Springfield in October.

Hampshire District Medical Society

The meetings will be held the second Wednesday of November, January, March and May.

Dr. Charles E. Smith will deliver an address at the November meeting. Title: "The Treatment of Cancer, with Special Reference to Radiation."

Middlesex East District Medical Society

Wednesday, November 19. Harvard Club. Dr. George K. Price, "Cerebral Aporia of Psychiatry."

Wednesday, January 21. Harvard Club. Dr. Franklin K. White, "Diagnosis of Gall-Bladder Disease."

Wednesday, March 18. Harvard Club. Dr. John H. Cunningham, "Urinary Retention: Its Significance and Treatment."

Wednesday, April 15. Harvard Club.

Wednesday, May 13. Colonial Inn, North Reading.

Middlesex North District Medical Society

January 28, 1925.

April 29, 1925.

Middlesex South District Medical Society

Winter Schedule.—The plan for winter meetings of the Society includes the stated meetings in October and April, two hospital meetings, and five meetings to be held in conjunction with the Suffolk District Medical Society and the Boston Medical Library (two surgical, two medical, and one general).

Norfolk District Medical Society

November 25, 1924. Masonic Temple, Roxbury. Subject: Diabetes—with especial reference to insulin. Speakers: Dr. Joslin and probably one other.

January 27, 1925. Masonic Temple. Subject: "Some Trends of Medical Teaching and Medical Practice." Speakers: Drs. Alvin Bogen and F. Borden.

February 24, 1925. Masonic Temple. Subject: "The Need of Periodical Physical Examinations and How to Make Them." Speaker: Dr. Francis H. McCradden. A second speaker will be selected to present another subject at this meeting.

March 31, 1925. Tufts College Medical School. This meeting given over to Drs. Leary and Watters for the purpose of giving us a medical examiner talk.

Norfolk South District Medical Society

Meetings will be held the first Thursday of each month from October to May, inclusive, at 12 noon, at the Norfolk County Hospital, South Braintree.

Dr. T. O'Donnell, District Health Officer, will read a paper at the meeting to be held October 2.

Suffolk District Medical Society

October 29. Stated meeting. "The Nullity of Psychoanalysis as a Scientific Concept." Dr. Joseph W. Courtney.

November 12. Surgical Section in association with the Middlesex South District Medical Society. "The Treatment of Septicemia by the Newer Methods." Dr. Edward B. Pieper, Philadelphia, Pa.

December 17. Medical Section in association with the Middlesex South District Medical Society. "The Newer Drug Treatment of Heart Disease." Dr. Charles E. Smith.

January 28. General meeting, in association with the Boston Medical Library and the Middlesex South District Medical Society. "Some Experiences of a Medico-legal Pathologist" (lantern slides). Dr. George B. Magrath.

February 25. Surgical Section, in association with the Middlesex South District Medical Society. "Pylonephritis." Dr. Arthur H. Crosbie.

March 25. Medical Section, in association with the Middlesex South District Medical Society. "The Treatment of Pneumonia." Dr. Edwin A. Locke.

April 29. Annual meeting. "Hypertension and Longevity." Dr. Harold M. Frost.

Worcester District Medical Society

November 12, 1924. Graham State Hospital. Dr. Charles Macle Campbell of the Psychopathic Hospital, Boston, will speak on "Nervous Disorders in Children."

Speaker to be announced.

January 7, 1925. Surgical meeting. Place, subject and speaker to be announced.

February 11, 1925. Memorial Hospital, Worcester. Papers will be read by the members of the Society.

March 11, 1925. St. Vincent's Hospital, Worcester. Papers will be read by the members of the hospital staff.

April 9, 1925. Subject and speaker to be announced.

May 14, 1925. Annual meeting.